

FORESTRY COMMISSION

Thirty-Eighth
Annual Report of the
Forestry Commissioners
for the year ended
30th September 1957

*Presented pursuant to Section 7 (3) of the Forestry
Act, 1945 (8 & 9 Geo. VI Ch. 35)*

*Ordered by The House of Commons to be Printed
12th June 1958*



LONDON

HER MAJESTY'S STATIONERY OFFICE

PRICE 5s. 6d. NET

FORESTRY COMMISSION,
25, SAVILE ROW,
LONDON, W.1.

31st March, 1958

To :

THE MINISTER OF AGRICULTURE, FISHERIES AND FOOD.
THE SECRETARY OF STATE FOR SCOTLAND.

Gentlemen,

In pursuance of Section 7 (3) of the Forestry Act, 1945, I have the honour to transmit the 38th Annual Report of the Forestry Commissioners covering the Forest Year ended 30th September 1957.

I am,

Gentlemen,

Your obedient Servant,

(Sd.) RADNOR,

Chairman.

CONTENTS

	<i>Page</i>
STATISTICAL SUMMARY OF OPERATIONS	6
Forestry Commission	6
Private Forestry	6
THE QUEEN'S VISIT TO THE FOREST OF DEAN, GLOUCESTERSHIRE ...	7
GENERAL REVIEW... ..	7
Forestry Commission Operations	7
Planting and Acquisition of Land	7
Zuckerman Report	9
Private Forestry	10
The Dedication and Approved Woodlands Schemes	10
Grants	10
Licensing of Fellings	10
The Felling Quota	11
Co-operative Forestry Societies	11
Production and Use of Home Grown Timber	11
Mining Timber... ..	11
Other Utilisation	12
Home Grown Timber Advisory Committee	12
Committee on Marketing of Woodland Produce	13
Rabbits and Myxomatosis	13
A Gift from Poland	13
Seventh British Commonwealth Forestry Conference	13
Other Conferences and Visits	14
Obituary: Lord Clinton, P.C., K.C.V.O.	15
SUMMARY OF THE YEAR'S WORK ...	16
ORGANISATION	19
The Forestry Commissioners... ..	19
The National Committees	19
The Regional Advisory Committees... ..	20
Home Grown Timber Advisory Committee	21
The Commissioners' Staff	22
Labour Employed	22
Wages and Conditions of Industrial Employees ...	22
THE YEAR'S WORK	23
The Forestry Fund	23
Financial Tables	23
Acquisition and Utilisation of Land... ..	24
Land not placed at the Disposal of the Commissioners ...	25
Number of Forests	25
Land Acquired during the Year	26
Progress of Acquisition of Plantable Land ...	26
Land Acquired to Date	27

	<i>Page</i>
Forestry Operations ...	28
Forest Nurseries	28
Seed Supply	28
Home Collected Seed ...	29
Imports of Seed ...	29
Sales of Seed ...	30
Nursery Work ...	31
Nursery Area	31
Use of Nursery Ground	31
Seed Sown	31
Stocks of Seedlings and Transplants	32
Sales of Nursery Stock	32
Expenditure and Receipts	32
Plantations	33
Plants used for Planting and Beating-up	34
Progress of Planting to Date ...	35
Expenditure	35
Forest Protection ...	35
Fire Protection	35
Protection against Damage by Animals, Birds, Insects and Fungi	36
Preparation and Sale of Produce	38
Thinning	38
Clear Felling	38
Production and Disposal of Forest Products ...	39
Income and Expenditure ...	40
Roads and Bridges	40
Estate Management ...	41
Buildings	42
Private Forestry	43
The Dedication Scheme	43
Approved Woodlands ...	44
Planting on Private Estates ...	44
Scrub Clearance Grants	45
Thinning Grants	45
Loans to Woodland Owners ...	46
Licensing of Timber Felling ...	46
Research and Experiment ...	47
Silviculture ...	47
Forest Genetics	48
Forest Pathology	49
Forest Management ...	49
Statistics ...	49
Forest Entomology ...	50
Utilisation Research ...	50
Machinery Research	50
Grants to Universities and other Institutions	51
Advisory Committee on Forest Research ...	51

	<i>Page</i>
Education	51
Forester Training Schools ...	51
Short Courses for Forest Workers ...	52
Forestry Apprenticeship Scheme ...	52
Northerwood House	52
Courses in Scotland ...	52
Publications	53
Normal Programme ...	53
Commonwealth Conference ...	54
Publicity and Public Relations	55
National Forest Parks...	56

APPENDICES

1. Financial Statement ...	59
2. Capital Expenditure	59
3. Forestry Operations Expenditure	59
4. Private Forestry Expenditure ...	60
5. Research Expenditure ...	60
6. Education Expenditure	60
7. General Administration	61
8. Plantations made during the Year: Summary by Conservancies ...	62
9. Summary of Species used for Planting and Beating Up	64
10. Summary Area Statement of Land Use: By Conservancies ...	65
Area Statements of Land Use: By Forests:—	
11. England	65
12. Scotland	70
13. Wales	75

MAPS

Outline Maps showing Distribution of Forests:—	
England	78
Scotland	84
Wales	88

ADDRESSES OF MAIN OFFICES OF THE FORESTRY COMMISSION ...	90
---	----

PHOTOGRAPHS	<i>... Central Inset</i>
--------------------	--------------------------

STATISTICAL SUMMARY OF OPERATIONS

Table 1

FOREST YEAR 1956			Forestry Commission	FOREST YEAR 1957		
Great Britain	...	56,200	Plantable Land Acquired, including Standing Woods (acres) Page 26	Great Britain	...	56,100
England	...	13,400		England	...	18,700
Scotland	...	31,000		Scotland	...	22,500
Wales	...	11,800		Wales	...	14,900
Great Britain	...	62,400	Area Planted (acres) Page 33	Great Britain	...	57,900
England	...	20,800		England	...	19,300
Scotland	...	29,800		Scotland	...	26,700
Wales	...	11,800		Wales	...	11,900
Great Britain	...	43,100	Area Thinned (acres) Page 38	Great Britain	...	46,900
England	...	22,100		England	...	25,200
Scotland	...	15,100		Scotland	...	13,900
Wales	...	5,900		Wales	...	7,800
Great Britain	...	18,339,900	Volume of Timber Felled (Hoppus feet) Page 39	Great Britain	...	19,998,300
England	...	8,930,600		England	...	9,689,100
Scotland	...	6,198,400		Scotland	...	6,707,800
Wales	...	3,210,900		Wales	...	3,601,400
Great Britain	...	443	Motorable Roads Constructed (miles) Page 41	Great Britain	...	400
England	...	151		England	...	91
Scotland	...	210		Scotland	...	175
Wales	...	82		Wales	...	134
Private Forestry						
Great Britain	...	27,100	Area Planted (acres) Page 45	Great Britain	...	31,600
England	...	12,200		England	...	14,000
Scotland	...	13,000		Scotland	...	15,200
Wales	...	1,900		Wales	...	2,400
Great Britain	...	35,200	Area Dedicated (acres) Page 43	Great Britain	...	40,100
England	...	16,500		England	...	21,500
Scotland	...	15,200		Scotland	...	16,000
Wales	...	3,500		Wales	...	2,600
Great Britain	...	445,300	Total area to date under Dedication Scheme (acres) Page 43	Great Britain	...	485,400
England	...	210,000		England	...	231,500
Scotland	...	218,600		Scotland	...	234,600
Wales	...	16,700		Wales	...	19,300
Great Britain	...	36,300	Area Accepted as Approved Woodlands (acres) Page 44	Great Britain	...	24,800
England	...	25,400		England	...	18,600
Scotland	...	9,700		Scotland	...	5,700
Wales	...	1,200		Wales	...	500
Great Britain	...	117,200	Total Area to date under Approved Woodlands Scheme (acres) Page 44	Great Britain	...	139,800
England	...	80,800		England	...	97,600
Scotland	...	32,800		Scotland	...	38,200
Wales	...	3,600		Wales	...	4,000
Great Britain	...	41,793,800	Volume Licensed for Felling (Hoppus feet) Page 46	Great Britain	...	41,744,200
England	...	23,734,800		England	...	25,592,400
Scotland	...	15,595,500		Scotland	...	13,239,900
Wales	...	2,463,500		Wales	...	2,911,900

THIRTY-EIGHTH ANNUAL REPORT
OF THE
FORESTRY COMMISSIONERS
FOR THE YEAR ENDED
30th SEPTEMBER 1957

**THE QUEEN'S VISIT TO THE FOREST OF DEAN,
GLOUCESTERSHIRE**

For the second year in succession Her Majesty the Queen and His Royal Highness the Duke of Edinburgh visited one of the forests in the Commissioners' charge. In 1956, the Queen and His Royal Highness visited Eggesford Forest, in Devon, for a ceremony to mark the planting by the Forestry Commission of a million acres; in April of the year under review a brief visit was paid to the Forest of Dean, one of the old royal forests. During a stop at the Speech House, where the ancient Court of Verderers is held, Her Majesty and His Royal Highness each planted a young oak tree. These saplings are the progeny of an oak planted in 1861 at Speech House by Prince Albert, Consort to Queen Victoria, which was itself grown from an acorn from a tree planted by Queen Elizabeth the First at Panshanger Park, near Hertford.

GENERAL REVIEW

The forest year which ended on 30th September, 1957 was uneventful. The weather, apart from some wind-throw by winter storms and a spring drought, permitted the orderly prosecution of the routine of forest works according to the season.

The area of new plantations made during the year by the Commission and private owners together amounted to 89,500 acres; in round figures this total is the same as in the previous year though there was a drop of 4,500 acres in the area planted by the Commission and an increase of the same order in the planting undertaken by private owners. The actual amounts planted were 57,900 acres by the Commission and 31,600 acres by private owners. Losses of plantations by fires (122 acres) were the lowest sustained by the Commission in any year since 1924. Another welcome feature was an exceptionally good seed year for beech, which may result in the filling up of blanks by natural regeneration and will certainly enable considerable stocks of beech to be built up for future planting.

On the production side the recorded output for the country of sawn timber, other than sawn mining timber, declined slightly, but against this may be set the greater quantity of home grown timber used in the pits.

Two Reports of importance to forestry were published; the Zuckerman Report⁽¹⁾ which deals with the question of marginal land, and the Watson Report⁽²⁾ on the marketing of woodland produce.

FORESTRY COMMISSION OPERATIONS

PLANTING AND ACQUISITION OF LAND

In their last Annual Report, for 1956, the Commissioners reviewed the results of the first decade of post-war forestry. It was shown that not only was the total area planted by the Commissioners far short of the desirable programme given in the 1943 White Paper on Forest Policy (Cmd. 6447)⁽³⁾,

⁽¹⁾ *Forestry, Agriculture and Marginal Land*. 1957. H.M.S.O. 4s. 0d.

⁽²⁾ *Report of the Committee on Marketing of Woodland Produce 1956*. H.M.S.O. 4s. 6d.

⁽³⁾ *Report on Post-War Forest Policy*, Cmd. 6447. 1943. H.M.S.O. 4s. 0d.

but that the acreage planted annually had begun to decrease since it reached a peak in Forest Year 1954. That trend has continued into the year under review, and the same is true of the acquisition of plantable land, as can be seen from the following statement and from Figure 1 below.

<i>Forest Year</i>	<i>Area Planted</i>	<i>Plantable Land Acquired*</i>
1953	67,600 acres	50,000 acres
1954	70,400 acres	73,500 acres
1955	67,900 acres	56,700 acres
1956	62,400 acres	54,200 acres
1957	57,900 acres	53,500 acres

* Net amount excluding standing woods.

PROGRESS OF PLANTING AND ACQUISITION OF LAND 1953 TO 1957

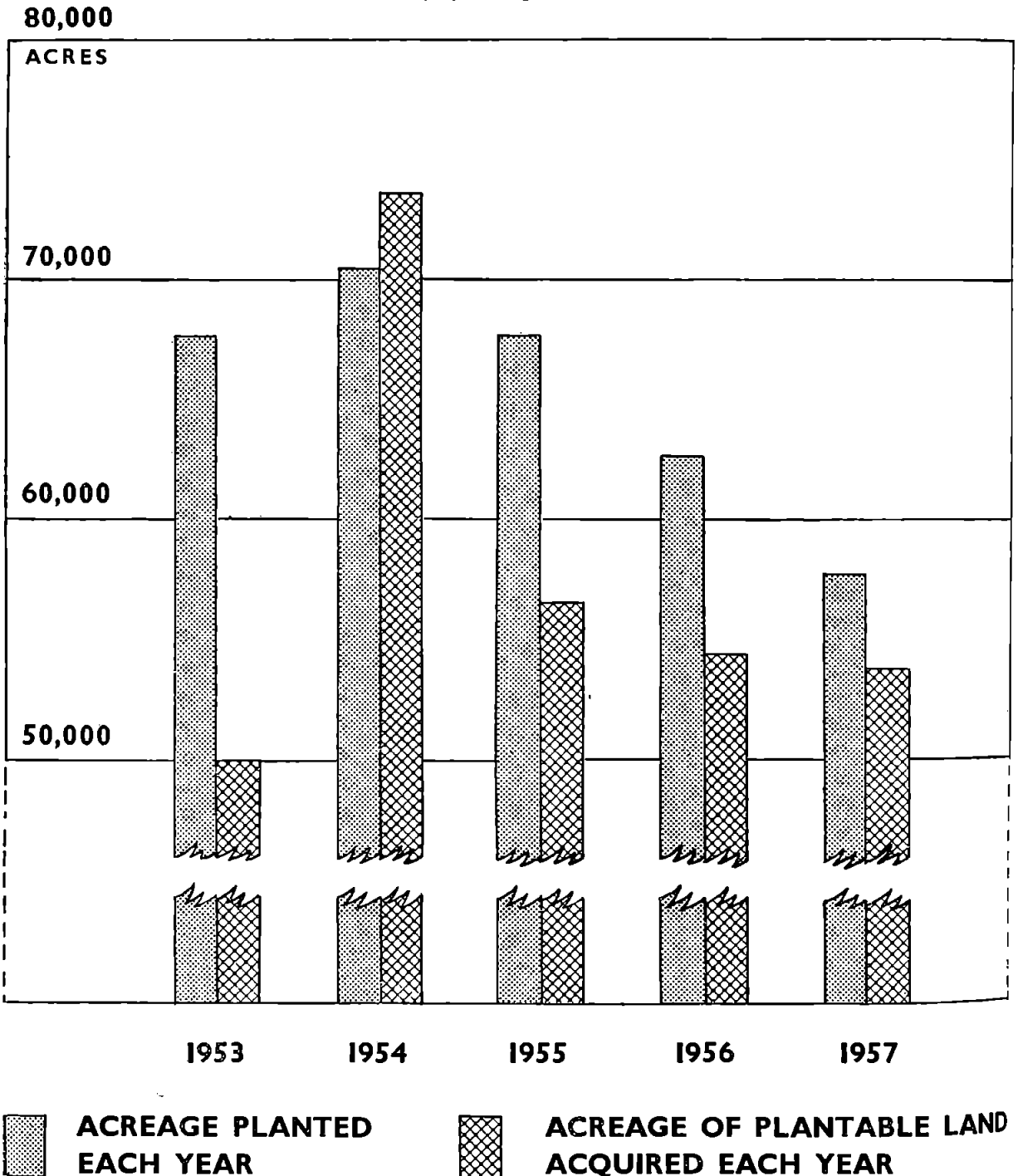


Figure 1. Progress of Planting and Acquisition of Land, 1953 to 1957.

The problem of stepping up of the rate of acquisition, and with it consequently the rate of planting, still remains. This was discussed in some detail on pages 8 and 9 of the 1956 Report, and examples were given of certain definite steps which had recently been taken to encourage owners to offer land for planting and to make forestry more acceptable to tenants of hill land. It is well, perhaps, to repeat briefly some of these steps, namely, continued maintenance of certain forest boundary fences, burning of fire belts, control of foxes, acceptance for acquisition of small as well as large areas, leases with breaks at the lessor's option at intervals as short as ten years, subject to dedication. As to prices of land, or rents or feu duties, the Commissioners would have it understood that they have no fixed maximum and are always ready to discuss this matter with any owner with the object of reaching a settlement fair to both parties, as circumstances vary with almost every acquisition.

ZUCKERMAN REPORT

In last year's Report the Commissioners expressed the opinion that: "There is a general recognition throughout the country, and in particular by the owners and occupiers of hill land, that in principle a substantial increase in forestry is desirable with the objective of raising the productivity of much of the hill land which is at present not being put to its best use." This view has been strongly reinforced in the recently published Zuckerman Report on Forestry, Agriculture and Marginal Land.* The Commissioners welcome this Report because, for the first time, the whole question of the proper use of marginal land in Great Britain has been thoroughly investigated, and by an impartial body. "Marginal Land" means, broadly speaking, the rough grazings and hills which are the areas where afforestation must find its place. It is not appropriate to comment in detail on the Report but the Commissioners would wish to say that they are in full agreement with it. Three points of special importance for forestry must, however, be picked out.

First, the conclusion that forestry and agricultural development should be planned as an integrated whole. The balance between these two forms of land use has been upset and largely destroyed over many hundreds of years by the heedless clearing and neglect of forests. This balance should be restored and the Commissioners' programme of afforestation will do much to bring this about. So that this may be most effectively carried out, the allocation of areas for afforestation should be a joint undertaking with agriculture, due regard being given to the effect of forestry on wild life and on the beauty of the countryside.

Secondly, that end uses for forest products, in addition to the traditional ones, should be found. Uses for wood are continually changing and the tendency is increasingly towards pulping and chipping for the making of paper and many forms of board. One of the most interesting of these recent developments is the use of hardwoods for pulping.

Thirdly, the conclusion that "there is probably a stronger economic reason now than there has been hitherto for investment in planting". In reaching this conclusion, the Zuckerman Report examined the basis for our forest policy. As a result of two world wars the objective was to replace and augment the growing stock of timber as a strategic reserve for use in a future war. The Report sees the justification for our forestry programme more in the social and economic benefits it can bring than in its relation to war-time needs.

* *Forestry, Agriculture and Marginal Land*. A Report by the Natural Resources (Technical) Committee, 4s. 0d. H.M.S.O. 1957.

As was announced in the House of Commons on 29th October, 1957, the Government have decided to carry out a thorough review of the bases and objectives of forestry policy, taking full account of all the economic, social and defence factors involved. Some at least of the views expressed in the preceding paragraph may therefore need reconsideration in the light of this review.

PRIVATE FORESTRY

Private Forestry continues to present the picture of an active industry with a steadily increasing acreage being planted each year. The acreages planted in each of the past five years are given below :

<i>Forest Year</i>						<i>Acres</i>
1953	...	...	...	...	...	18,200
1954	...	...	...	...	...	19,100
1955	...	...	...	...	...	22,100
1956	...	...	...	...	...	27,100
1957	...	...	...	...	...	31,600

This is a particularly encouraging achievement in view of rising costs and an apparent shortage of plants. To reduce the effect of this shortage, the Commission made available nearly 12 million transplants and 9 million seedlings, drawn from normal nursery surpluses and also from the special sowings made for the purpose last year. These special sowings were repeated this year. There are, however, clear indications of more nursery work being done on private estates and of the opening or extension of nurseries by the trade. Furthermore, trade stocks of seedlings are substantially more than last year. It would seem therefore that serious shortages of plants are being overcome.

THE DEDICATION AND APPROVED WOODLANDS SCHEMES

Progress continues to be made in the number of estates coming into the Dedication and Approved Woodlands Schemes ; the additions, which in both cases exceeded those for the previous year, were 40,100 acres and 24,800 acres respectively. Inclusion in these schemes requires that woodlands shall be managed in accordance with the principles of good forestry, and it is satisfactory to note that taking both schemes together there are now 625,000 acres of private woodlands being looked after under accepted plans of management, with in addition a considerable area of efficiently managed woodlands the owners of which have not considered it necessary to come into either scheme.

GRANTS

Grants as hitherto continue to be available to assist owners ; no changes were made during the year in the amounts payable.

LICENSING OF FELLINGS

The number of felling licence applications during the year amounted to 7,808, which was 5 per cent. less than in the previous year. The quotas for coniferous timber (7.3 million hoppus feet) and for hardwoods (26.0 million hoppus feet) were not fully taken up, by 4 per cent. and 9 per cent. respectively. The total amount licensed for felling, including thinnings which do not count against the quotas, amounted to 41.744 million hoppus feet.

THE FELLING QUOTA

Following the usual procedure, the felling quota for the year was fixed in consultation with the Home Grown Timber Advisory Committee ; the conifer quota was raised slightly from 7.1 to 7.3 million hoppus feet, while the broad-leaved quota remained as before at 26.0 million hoppus feet.

The quotas allocated to countries were as follows:—

		<i>Thousands of hoppus feet</i>			
		<i>England</i>	<i>Scotland</i>	<i>Wales</i>	<i>Total</i>
Coniferous	...	2,200	4,700	400	7,300
Broadleaved	...	18,900	4,400	2,700	26,000

CO-OPERATIVE FORESTRY SOCIETIES

Progress can also be recorded here ; and the interest in co-operative forestry in the Eastern Counties, as mentioned in last year's Report, has resulted in the formation of the East Anglian Woodland Association Ltd., the activities of which cover Norfolk, Suffolk and parts of Cambridge and Essex. The Commissioners believe that the advantages of such societies are now being realised to a greater extent than before by woodland owners in general.

PRODUCTION AND USE OF HOME GROWN TIMBER

The production of sawn timber, other than sawn mining timber, showed a further decline during the year, the recorded out-turn of hardwoods and softwoods being 5 per cent. and 3½ per cent. respectively lower than in Forest Year 1956. Production of sleepers and crossings was maintained about the same level, but the output of wagon timbers, both hardwood and softwood, was significantly lower than in the previous year.

Towards the end of the year negotiations were proceeding between the British Transport Commission and the Federated Home Timber Associations for a trial order of three thousand sleepers in oak, beech and elm. Subject to this trial order being satisfactory, discussions would commence as to the prices at which future supplies would be made.

MINING TIMBER

The price agreements for home grown round mining timber were reviewed during the year. For peeled pitprops sold on the 100 lineal foot basis to the National Coal Board in England and Wales the revised free-on-transport prices showed increases equivalent to 7 per cent. on the 2½ inch–4 inch top diameter props (approximately 4d. per hoppus foot), and 4 per cent. on the 4½ inch and larger diameters (approximately 2½d. per hoppus foot). The maximum limit on recoverable freight was raised from 38s. to 41s. per ton. The new agreement covers a period of two years from 1st July, 1957. In Scotland, prices for round peeled pitprops delivered to the Scottish Division of the National Coal Board were increased by the equivalent of 3d. per hoppus foot on props with a top diameter of from 2 to 4 inches, and 1½d. per hoppus foot on the 4½ inch and larger sizes. This revised schedule of prices operates for a period of one year from 1st July, 1957.

For round unpeeled pitwood and laggings sold by weight to the National Coal Board's South-Western Division, the revised price schedule operative for a period of one year from 1st July, 1957 showed increases of 2s. 6d. per ton for pitwood and 7s. 6d. per ton for laggings, and an increase from 35s. to 38s. 6d. per ton in the maximum recoverable freight charge.

The recent slight upward trend in the consumption of home grown timber in the mines continued, and total purchases by the National Coal Board during the year showed an encouraging overall increase of approximately 8 per cent., mainly attributable to sawn mining timber. In some localities, however, a build-up of stocks in merchants' yards towards the end of the year indicated production in excess of current requirements in the nearest

convenient coalfield. Despite a slight drop in Scotland, colliery acquisitions of round timber showed an overall increase of approximately 3½ per cent. There was also an increased demand for softwood laggings in the coalfields of the South-Western Division of England and Wales. The bundling for mechanical handling of certain specifications of mining timber, e.g. chocks and lids, strongly favoured by the National Coal Board, remains a live issue in the home trade.

OTHER UTILISATION

In the field of utilisation, an outstanding development during the year was the opening in September, 1957 of the new insulation board mill at Queensferry in Flintshire. The establishment of this factory to process waste from, and also timber unsuitable for use in, the Company's sawmilling, pitpropping and wood wool manufacturing plants marks an important stage towards complete integration, by effecting full and selective utilisation of small and medium-sized conifer thinnings. The wood wool manufacturing plant installed earlier in the year at Newtown, Montgomery, is claimed to be the most up-to-date of its kind in Great Britain.

A modern Swedish "Ari" type sawmill with certain special modifications to enlarge its usefulness, and planned to achieve maximum efficiency in the conversion of home grown softwood logs, has been erected at Ormskirk, Lancashire and commenced production during 1957.

The production capacity of the Weyroc factory at Annan, Dumfriesshire was increased by the installation of a new type of chipping machine, thereby extending the size of roundwood acceptable from 8 inches up to 12 inches in diameter and also appreciably increasing the quantity required. Supplies are now purchased on a peeled basis only. Quantity and continuity of supplies during the year were reported to be satisfactory.

Deliveries of pulpwood to the new hardwood pulp mill at Sudbrook, Monmouthshire, started in 1957, and the mill is expected to commence production early in 1958. We understand that the annual consumption of this mill is expected to be appreciably above the original estimate of 36,000 tons.

The European Productivity Agency's project to investigate small scale pulping developments was finally approved in June, 1957 and an eminent Canadian consultant was appointed to undertake the investigations. He is expected to visit Britain in the Spring of 1958 to conduct field surveys in selected locations where the output of forest produce in the form of silvicultural thinnings is at present, or in the near future is likely to be, surplus to existing markets.

HOME GROWN TIMBER ADVISORY COMMITTEE

Meetings of the Home Grown Timber Advisory Committee were held in March and July, 1957, at which normal matters arising out of the Forestry Act, 1951 were discussed.

The meetings which would normally have been held in October, 1956 and January, 1957 were postponed pending consideration of the Report of the Committee on Marketing of Woodland Produce, in view of a recommendation therein for the re-constitution of the Committee. The period of appointment of the present Committee expired on 7th September, 1957, but having regard to the above, all members were re-appointed for a further period to expire on 30th June, 1958.

COMMITTEE ON MARKETING OF WOODLAND PRODUCE

As noted last year, the Report of this Committee* was published on 12th December, 1956. The recommendations were under active discussion with the United Kingdom Forestry Committee during the period under review, and useful progress was made.

RABBITS AND MYXOMATOSIS

There is no doubt that in spite of myxomatosis and the efforts of many owners and tenants of land, rabbits are on the increase and are on their way to re-infest areas over which they have been virtually exterminated. A mild winter, abundance of food and a free field favoured a rapid increase, and while myxomatosis is still active in certain parts and still exercises some control it is less effective in rapidly reducing numbers than it was when concentrations were high. Further, a less virulent type of the disease has been found in a number of counties alongside the more virulent form, and tests on a number of rabbits have shown that some of them, presumably after recovery from an attack, have acquired an immunity.

It is feared that the advantage given by myxomatosis may be fast slipping away and that unless a practical, coordinated and sustained campaign is pursued against rabbits, they will again become an unmitigated and expensive pest to both agriculture and forestry.

A GIFT FROM POLAND

The Commissioners were the grateful recipients of a gift from the Government of Poland of a pair of young European bison. These rare animals were formally handed over by the Polish Ambassador, His Excellency Mr. Milnickiel, at a ceremony at the Zoological Gardens in Regent's Park and were accepted on behalf of the Commissioners by the Earl of Radnor.

The European bison, a forest animal once plentiful in the forests of Europe, was at one time brought almost to extinction but herds are being built up again though the total number of animals is less than two hundred. Most of these are in Poland but there is also a considerable number in zoological gardens in other countries in Europe. While it is not intended to enrich our wild forest fauna by the liberation of these animals, it is hoped that ultimately a breeding herd may be established in this country. Meanwhile they are being taken care of in the Zoological Gardens in Regent's Park, and are doing well (See Plate 4).

SEVENTH BRITISH COMMONWEALTH FORESTRY CONFERENCE

British Commonwealth Forestry Conferences were first instituted in 1920, and have been held periodically since then in one or other of the Commonwealth countries for the exchange of information and ideas on forest policy and technique. The seventh of these conferences was held in Australia and New Zealand from 26th August to 10th October, 1957. To this the Commonwealth countries and the Colonies sent delegations representative of their forestry interests, their forest products research organisations, and also of the timber trade.

The delegation from the United Kingdom included Sir Arthur Gosling, Director General, Mr. J. Macdonald, Director of Research and Education, Mr. G. B. Ryle, Director of Forestry for Wales, and Mr. C. D. Begley, District Officer and Secretary to the Standing Committee on British Commonwealth

* Report of the Committee on marketing of Woodland Produce, 1956. H.M.S.O. 4s. 6d.

Forestry. The Colonial Office, the Commonwealth Forestry Bureau, the Empire Forestry Association, the Forest Products Research Laboratory, the Imperial Forestry Institute and the University of Edinburgh also sent representatives.

The main conference sessions were held in Australia in Adelaide and Canberra and in New Zealand in Rotorua and Christchurch. In both countries, visits were made to the principal forest areas including extensive plantations of exotic tree species, notably in South Australia where very little native forest exists, and in New Zealand, where reserves of native conifers are somewhat limited. These plantations were of particular interest to the delegates from Great Britain where the need to extend forest resources, particularly in conifers, has also led to the wide use of exotic species. The role of exotics in afforestation was one of the principal items on the conference agenda and a comprehensive report of our experiences in this field, entitled "Exotic Forest Trees in Great Britain"* was prepared for and presented at the Conference.

OTHER CONFERENCES AND VISITS

In addition to the British Commonwealth Forestry Conference, the United Kingdom was represented by officers of the Commission at other international meetings abroad as follows:—

Geneva, November, 1956—Second Session of the F.A.O.—E.C.E. Working Party on Forest and Forest Products Statistics: Dr. F. C. Hummel (Divisional Officer, Research Branch).

Utrecht, November, 1956—International Commission for the Nomenclature of Cultivated Plants: Mr. J. D. Matthews (District Officer, Research Branch).

Paris, April, 1957—Ninth Session of the International Poplar Commission and The Sixth Session of the International Poplar Congress: Mr. T. R. Peace (Divisional Officer, Research Branch).

Rome, May, 1957—Ninth Session of the European Forestry Commission of F.A.O.: Sir Henry Beresford-Peirse (Deputy Director General) in his capacity of Chairman of the European Forestry Commission, Mr. C. A. J. Barrington (Conservator), and Mr. E. G. Richards (Utilisation Research Officer).

Badenweiler, June, 1957—Permanent Committee of the International Union of Forest Research Organisations: Mr. James Macdonald (Director of Research and Education) in his capacity of President of the Union.

Moscow, September, 1957—Second Session of the Joint F.A.O.—E.C.E. Committee on Forest Working Techniques and the Training of Forest Workers: Mr. E. G. Richards (Utilisation Research Officer) in his capacity of Chairman of the Joint Committee, Mr. J. W. L. Zehetmayr (Divisional Officer on Work Study duties) and Col. R. G. Shaw (Machinery Research Officer).

The annual meeting of the British Association for the Advancement of Science was held in Dublin in September, 1957. A paper for consideration by the Forestry Sub-Section was prepared by Dr. F. C. Hummel (Divisional Officer, Research Branch).

A Nuffield Foundation Travelling Fellowship for the study of forest insect conditions and methods of control in Canada was awarded to Dr. Myles Croke (District Officer, Research Branch).

* Published as Forestry Commission Bulletin No. 30. *Exotic Forest Trees in Great Britain*. H.M.S.O. 17s. 6d.

OBITUARY

LORD CLINTON, P.C., G.C.V.O.

Lord Clinton, who died on 5th July, 1957, at the age of 94, was one of the great figures in forestry who, in the years following the First World War, did much to shape the future of State forestry in Britain.

He was appointed a Forestry Commissioner in 1919 under the new Forestry Act of that year, and along with Lord Lovat, who was appointed Chairman, Sir John Stirling Maxwell, Lord Robinson, Sir Francis Acland, Col. W. Steuart Fotheringham, Sir L. Forestier Walker and Mr. T. B. Ponsonby formed the newly constituted Forestry Commission.

Lord Clinton's thorough knowledge of forestry, derived from the management of his own considerable forest properties, his knowledge of all forms of land use along with his wide experience in public affairs, were of great value to the Commission, and in 1927 he succeeded Lord Lovat as Chairman which office he held till 1930. During his period of office Lord Clinton was Chairman of the Third British Empire Forestry Conference which was held in Australia and New Zealand in 1928.

Lord Clinton led a very active life and enjoyed working in his own woods. But the management of his estates, extensive though they were, did not hinder him from undertaking other duties; he was chairman of the Lawes Agricultural Trust Committee, the governing body of the Rothamsted Experimental Station, during 1924 to 1937, and he also held the office of Lord Warden of the Stannaries in the Duchy of Cornwall from 1922 to 1933.

When forestry personalities are brought to mind Lord Clinton will always be remembered as a competent, enthusiastic and energetic forester, who did much for forestry in Britain.

SUMMARY OF THE YEAR'S WORK

A dry autumn and a mild, open winter permitted good progress to be made with planting and nursery work. Dry conditions in the spring and early summer adversely affected some of the nurseries and plantations. After a hot and sunny June, the weather became cool and wet and not particularly favourable for growth. While fire danger existed in some parts of the country from April to June, the area of plantations destroyed by fire was among the lowest recorded.

The Forestry Fund. Payments and Receipts for the forest years ended 30th September, 1956 and 1957 were:

		<i>1956</i>		<i>1957</i>
Payments	... ..	£11,235,170		£12,209,471
Receipts	... ..	£2,736,690		£3,140,922

The amount paid into the Forestry Fund from Parliamentary Votes during the forest year ended 30th September, 1957, was £9,360,000 made up of £4,710,000 from the Vote for the financial year ended 31st March, 1957, and £4,650,000 from the Vote for the financial year ending 31st March, 1958 (page 23).

Land Acquired. The net area of plantable land acquired during the year was 56,115 acres, comprising 34,563 acres of bare land, 18,962 acres of felled woodlands and 2,590 acres of standing woods (Table 5, page 26).

The total area of land, at 30th September, 1957, acquired through the Forestry fund, under the Forestry (Transfer of Woods) Act, 1923, and by gifts, was 2,253,800 acres. This comprised 1,443,500 acres classed as "Forest Land" which is already planted or will be planted in due course, and 810,300 acres of "Other Land", which includes nurseries, rough grazings and agricultural land, and also other land unsuitable for tree planting. The areas of these categories of land held in England, Scotland and Wales are given in Table 3, page 24.

New Forests. Nine new forests, two being formerly part of existing forests, were formed during the year, while six previously existing units were merged with neighbouring forests; the net increase in number was thus three (page 25).

Forest Nurseries. The area in use as forest nurseries was 2,151 acres. Seed sown during the year amounted to 210,910 lb. of broadleaved tree seed of which approximately half was acorns and half beech seed; conifer seed sown totalled 16,249 lb. Stocks of forest trees in the nurseries totalled 489·2 million, of which 140·8 million were transplants and 348·4 million were seedlings (pages 28 to 32).

Forestry Commission Planting

The area planted during the year was 57,881 acres, a reduction of 4,519 acres compared with last year's figure of 62,400 acres. The number of trees used for new planting and for replacing failures in recently planted areas was 112 million—(pages 33 to 35).

Forest Protection. Losses of plantations from fires were exceedingly light, 122 acres in all. The number of fires in or threatening Commission plantations was 925, of which 86 per cent. were extinguished before causing damage to plantations. The assessed damage and cost of extinguishing was £9,000 (page 35).

Rabbits are now returning to many areas from which they had been virtually cleared by myxomatosis. The numbers destroyed by Commission warreners increased to 60,600 ; in the previous year 41,000 were killed. The number of hares killed has also increased, 24,100 as against 20,700 in the previous year (page 37).

In Commission forests, 42,900 grey squirrels were destroyed compared with 20,600 last year. The number of foxes killed was 5,094 ; last year the total was 5,523 (page 37).

Preparation and Sale of Produce

Thinning and Clear Felling. Thinnings were made in 46,878 acres of young plantations. The area clear felled was 6,504 acres of which 3,451 acres were scrub woodlands and 897 acres were coppice or coppice with standards (page 38).

Production and Disposal of Forest Products. The total volume felled was just short of 20 million hoppus feet of which 15.5 million came from thinnings and 4.5 million from clear fellings. Disposals included ; standing timber, including thinnings, 6.81 million hoppus feet ; round timber and saw logs, including telegraph and other selected poles, 3.96 million hoppus feet ; mining timber, 2.75 million hoppus feet ; posts, stakes and unselected poles, 1.80 million hoppus feet ; pulp-wood and boardmill material, 1.66 million hoppus feet ; firewood and cordwood, 1.54 million hoppus feet. Gross income was £2,477,000 ; direct expenditure on felling, preparation and despatch of produce was £1,182,000 (pages 39 and 40).

Roads and Bridges. Work was undertaken at 219 forests ; 400 miles of roads were completed, with 313 in course of construction (pages 40 and 41).

Housing. During the year 60 houses for forest workmen and supervisors were completed ; 36 were under construction at the end of the year (page 42).

The Dedication Scheme. Dedication was completed by the owners of 141 estates covering 40,100 acres of woodlands ; in addition Plans of Operations for 152 estates in respect of 46,400 acres were agreed for Dedication (page 43).

Approved Woodlands. During the year, 82 estates with 24,800 acres of woodlands were accepted as Approved Woodlands (page 44).

Planting on Private Estates. The area planted during the year on private estates is estimated at 31,600 acres, of which 28,600 acres qualified for planting grants. In the previous year a total area of 27,200 acres was planted (page 44).

Licensing of Timber Felling. 6,788 licences were issued to private estates authorising the felling of 41.744 million cubic feet of timber (page 46).

Research and Experiment. Research work on a wide range of forestry problems has been continued at the Forest Research Station, Alice Holt Lodge, Farnham, Surrey, and in experimental areas in many of the Commission's forests and nurseries throughout the country (pages 47 to 51).

Grants for forest research in specific fields have been made to Universities and other Institutions (page 51).

Education. The number of Forester Training Schools maintained by the Commission was reduced from five to four by the closing down of the School at Thetford Forest. The two-year course given at these Schools was completed by 119 men ; 84 took employment with the Commission, 4 with private estates, 9 took up posts or returned after training to posts in Tanganyika,

Nyasaland, Kenya and Northern Rhodesia, 9 returned to posts in Northern Ireland ; 7 entered other employment (pages 51 and 52).

Publications. Eleven new publications for sale were issued ; 12 were revised and re-issued. Nine papers by members of the Commission's staff for presentation at the British Commonwealth Forestry Conference in Australia and New Zealand, were published, and 10 papers by members of Universities and other Institutions were printed for the same Conference (page 53).

Publicity and Public Relations. The public were kept informed of the work of the Commission through the normal channels. A number of features on forestry were broadcast on the B.B.C.'s sound radio service which also issued fire warnings when the risk was high. Forest fire scenes on film were shown by an independent television company between programmes. Exhibits were arranged at the major agricultural shows. The scheme for School Forests was continued and display material loaned to schools. Over 200 lectures were given by Forest Officers to schools and other bodies (page 55).

ORGANISATION

THE FORESTRY COMMISSIONERS

Her Majesty the Queen approved the appointment of two Commissioners to fill vacancies in the Commission: Mr. Robert Taylor, J.P. was appointed in the place of Mr. John McNaughton, C.B.E., who retired in 1956 on taking up his appointment as a member of the Crofters Commission; and Mr. Edward Bryan Latham in the place of Mr. Stanley C. Longhurst whose term of office had expired and who did not wish to be considered for re-appointment.

The Chairman and the Forestry Commissioners at the close of the year were :

The Earl of Radnor, K.C.V.O., *Chairman*
Mr. J. M. Bannerman, O.B.E.
Major D. C. Bowser, O.B.E.
Lt.-Col. Sir Richard Cotterell, Bt., J.P.
Mr. A. P. F. Hamilton, C.I.E., O.B.E., M.C.
Mr. Lloyd O. Owen, J.P.
Major Sir John Stirling of Fairburn, K.T., M.B.E.
Mr. W. H. Vaughan, C.B.E., J.P.
Mr. Robert Taylor, J.P.
Mr. Edward Bryan Latham, M.M.

Secretary to the Commissioners : Mr. H. A. Turner.

THE NATIONAL COMMITTEES

The National Committees for England, Scotland and Wales, which are appointed by the Commissioners in accordance with Section 3 of the Forestry Act, 1945, met monthly throughout the year except in August.

There were few changes during the year: The Earl of Listowel and Mr. S. C. Longhurst resigned from the Committee for England, and Capt. J. Craig was appointed to the Committee for Scotland. The Committee for Wales remained unchanged.

The membership of these Committees as constituted at the end of the year is given below, the Chairman of the Forestry Commission being *ex-officio* a member of each Committee.

THE NATIONAL COMMITTEE FOR ENGLAND

Lt. Col. Sir Richard Cotterell, Bt. (*Chairman*), Mr. C. M. Floyd, Mr. A. P. F. Hamilton, The Duke of Northumberland. *Secretary to the Committee* : Mr. E. S. J. Hinds.

THE NATIONAL COMMITTEE FOR SCOTLAND

Major Sir John Stirling of Fairburn (*Chairman*), Mr. J. M. Bannerman, Major D. C. Bowser, The Earl Cawdor, Capt. J. Craig, Mr. John McNaughton. *Secretary to the Committee* : Mr. A. D. Palmer.

THE NATIONAL COMMITTEE FOR WALES

Mr. Lloyd O. Owen (*Chairman*), Mr. A. P. F. Hamilton, Mr. J. E. Lewis, Dr. R. Phillips, Mr. P. R. D. Spurgin, Mr. W. H. Vaughan. *Secretary to the Committee* : Mr. T. H. McGeorge.

Note: Mr. E. Bryan Latham was appointed to the Committee for England and Mr. R. Taylor to the Committee for Scotland on 3rd October, 1957.

THE REGIONAL ADVISORY COMMITTEES

Regional Advisory Committees for each Conservancy, appointed under the Forestry Act, 1951, Section 15, met at intervals during the year. The membership of these Committees at the end of the year is given below:

ENGLAND

North-West Conservancy.—The Earl of Bradford (*Chairman*), Alderman J. V. Allen, Mr. J. L. Benson, Mr. R. F. Dickinson, Mr. J. Edwards, Mr. G. R. Jacob, Mr. R. W. S. Thompson, Mr. C. J. Venables, Mr. D. H. White. *Secretary to the Committee*: Mr. J. Steele. The Committee met in November, 1956 and in May, 1957.

North-East Conservancy.—Lord Bolton (*Chairman*), Professor J. S. Allen, Mr. R. H. B. Hammersley, Mr. W. P. Hedley, Mr. A. Kirkup, Jr., Mr. A. M. Leitch, Mr. R. Minto, Jr., Mr. R. Stanley, Mr. H. Wardale. *Secretary to the Committee*: Mr. L. A. Chaplin. Meetings were held in December, 1956 and in June, 1957.

East Conservancy.—Major Sir Richard G. Proby, Bt. (*Chairman*), Lt.-Col. M. E. St. J. Barne, Major R. L. Coke, Mr. A. V. Hilton, Mr. N. D. G. James, Mr. G. Oates, Mr. C. H. Thompson, Mr. R. B. Verney, The Earl of Yarborough. *Secretary to the Committee*: Mr. G. H. Clark. The Committee met in March and September, 1957.

South-East Conservancy.—Mr. G. E. H. Palmer (*Chairman*), Mr. A. E. Aitkins, Lt.-Col. W. R. Burrell, Mr. G. E. H. Calvert, The Rt. Hon. Viscount Cowdray, Mr. A. L. F. Hills, Major J. M. Mills, Mr. W. H. Pearson, Major R. E. Whitaker. *Secretary to the Committee*: Mr. H. W. Gulliver. There were meetings in October, 1956, and in February and May, 1957.

South-West Conservancy.—Mr. W. E. Hiley (*Chairman*), The Earl Bathurst, Lord Hylton, Mr. J. R. Maer, Major J. L. Pilling, Mr. M. Philips Price, M.P., Mr. L. C. Wheeler, Lt.-Commander R. J. B. White, Brig. C. H. Woodhouse. *Secretary to the Committee*: Mr. R. Coote. The Committee met in October, 1956, and in January, April and September, 1957.

SCOTLAND

North Conservancy.—Major D. J. Brodie of Lethen (*Chairman*), Mr. J. Armstrong, Mr. G. Brown, Mr. R. Dean, Mr. J. Grant, Mr. A. N. S. Kinnear, Mr. A. R. Mackenzie, Mr. A. B. L. Munro-Ferguson. *Secretary to the Committee*: Mr. M. Nicolson. The Committee met in November, 1956, and in June, 1957.

East Conservancy.—Professor H. M. Steven (*Chairman*), The Earl of Dundee, Lord Glentanar, Mr. J. B. Hendry, Sir Ian Forbes Leith, Bt., Mr. A. Duncan Millar, Lt.-Col. J. W. Nicol, Bailie R. A. Raffan, Mr. W. J. Riddoch. *Secretary to the Committee*: Mr. J. P. Lenman. Meetings were held in November, 1956, and in May, 1957.

South Conservancy.—Major S. F. Macdonald Lockhart (*Chairman*), Sir James Hunter Blair, Bt., Mr. A. B. Duncan, Mr. W. P. Earsman, Mr. T. E. Hubbard, Mr. D. M. McQueen, Commander D. Herries Maxwell, Mr. J. Roe, Mr. R. F. Wilson. *Secretary to the Committee*: Mr. T. Farmer. There were meetings in October, 1956, and in March, 1957.

West Conservancy.—Sir George I. Campbell, Bt., of Succoth (*Chairman*), Mr. P. Campbell, Lt.-Col. W. D. H. C. Forbes, Mr. R. M. Hamilton, Professor J. Kirkwood, Mr. W. D. McGregor, Mr. P. S. Murray, Jr. *Secretary to the Committee*: Mr. B. Kinnaird. The Committee met in October, 1956, and in March and July, 1957.

WALES

North Conservancy.—Col. P. R. Davies-Cooke (*Chairman*), Mr. P. S. Barnie, Capt. G. L. Bennett Evans, Mr. T. Jones, Lt.-Col. H. M. C. Jones-Mortimer, Capt. J. Hext Lewis, Professor E. C. Mobbs, Mr. D. Tudor, Lt.-Col. J. F. Williams-Wynne. *Secretary to the Committee* : Mr. K. Mayhew. Meetings took place in November, 1956, and in March and in June, 1957.

South Conservancy.—Major J. D. D. Evans (*Chairman*), Mr. D. G. Badham, Mr. H. H. Busher, Mr. B. Davies, Mr. I. G. Gordon, Mr. H. A. Hyde, Mr. A. J. Llewellyn, Mr. M. H. Maxwell. *Secretary to the Committee* : Mr. E. H. Bradford. This Committee met in October, 1956, and in March, 1957.

HOME GROWN TIMBER ADVISORY COMMITTEE

The membership of this Committee is given below. As explained on page 12 the normal quarterly meetings which should have been held in October, 1956, and January, 1957, were postponed, and the period of appointment of the present members extended to 30th June, 1958.

The Earl of Radnor	...	Chairman, Forestry Commission (<i>Chairman of the Committee</i>)
Mr. A. P. F. Hamilton	...	} Forestry Commission
Sir Arthur Gosling	...	
Mr. O. J. Sangar	...	
Mr. A. Watt	...	
Mr. G. B. Ryle	...	
Mr. J. Macdonald	...	
Mr. H. A. Turner	...	
Mr. J. Rea Price	...	Board of Trade
Lord Bolton	...	} Country Landowners Association
Major Sir Richard G. Proby, Bt.	...	
Mr. W. E. Hiley	...	
Mr. C. M. Floyd	...	
The Duke of Buccleuch	...	} Scottish Landowners Federation
The Earl Cawdor	...	
The Earl of Dundee	...	
Capt. J. Maxwell Macdonald	...	
Mr. G. R. Jacob	...	} Federated Home Timber Associations
Mr. C. J. Venables	...	
Mr. H. N. Sadd	...	
Mr. F. G. Chalke	...	
Mr. T. Bruce Jones	...	} Home Timber Merchants Association of Scotland
Mr. Bruce B. Kennedy	...	
Mr. J. C. McGregor	...	
Mr. Bryan Latham	...	Timber Trades Federation

Secretary: Mr. H. R. Flowers

THE COMMISSIONERS' STAFF

The organisation of the Commissioners' staff remained substantially unchanged during the year. The total number of non-industrial staff at 30th September, 1957, was 2,604; these included 437 professional, scientific and technical staff (mainly Forest Officer and Engineer grades) and 1,311 supervisory staff in the Forester grades.

Mr. A. H. H. Ross, O.B.E., Director of Forestry for Scotland since July, 1953, retired on 23rd March, 1957 and was succeeded in this post by Mr. A. Watt, Conservator on the Headquarters Staff of the Commission.

LABOUR EMPLOYED

The number of men, women and juveniles employed in an industrial capacity at 30th September, 1957, was 13,040, as compared with 13,112 at the end of the previous year. Of these 5,469 were in England, 4,425 in Scotland and 3,146 in Wales.

WAGES AND CONDITIONS OF INDUSTRIAL EMPLOYEES

The wage rates of the Commission's forest workers remained unchanged during the year under report. There were, however, discussions on the Forestry Commission Industrial and Trade Council on a claim for increased rates of pay and on a claim for a reduction in the hours of work. Agreement was reached on increases in the minimum rates of pay to come into effect early in the following forest year; this raised the minimum for adult male forest workers from 144s. to 153s. from 28th October, 1957. The Council were unable to reach agreement on the claim for a reduction in the 47-hour working week which was referred to the Industrial Court.

The wages and conditions of employment of forestry workers on private estates are the concern of the Agricultural Wages Boards. The Agricultural Wages Board for England and Wales awarded increases from the same forward date of 28th October, 1957, the minimum adult wage for males being increased from 141s. to 150s. per week. The Board for Scotland made an award in March, 1957, which increased the minimum wage for adult males by 6s. to 138s. per week.

THE YEAR'S WORK

THE FORESTRY FUND

The Forestry Fund was established by the Forestry Act, 1919. From this Fund is defrayed all the expenditure of the Commissioners, and into it are paid their receipts from sales of produce, rentals, etc., together with the amounts drawn against the annual Parliamentary Vote. Any balance of a Vote not required during the year for which it was voted may not be drawn into the Forestry Fund but the Commissioners are permitted to carry forward a small working balance to the next Financial Year.

In Table 2 below are shown the drawings during each Forest Year and also the state of the Fund at the 30th September (the end of the Forest Year).

FORESTRY FUND—SUMMARY

Table 2

Years ended 30th September

£

	Balance from Preceding Year	Receipts			Payments
		Total	From Parliamentary Votes	Other	
	(1)	(2)	(3)	(4)	(5)
GRAND TOTAL. 1920-1957 ...	—	117,694,240	88,620,800	29,073,440	117,275,037
1920-29 ...	—	4,421,484	3,570,000	851,484	4,502,018
1930-39 ...	—	8,114,652	6,292,800	1,821,852	7,926,093
1940-49 ...	—	26,370,778	18,945,000	7,425,778	26,238,789
1950 ...	240,014	7,030,748	5,495,000	1,535,748	7,025,414
1951 ...	245,348	8,161,846	6,350,000	1,811,846	8,012,098
1952 ...	395,096	9,258,033	6,893,000	2,365,033	9,277,642
1953 ...	375,487	9,258,319	7,041,000	2,217,319	9,421,426
1954 ...	212,380	10,357,941	7,850,000	2,507,941	10,373,211
1955 ...	197,110	11,131,827	8,473,000	2,658,827	11,053,705
1956 ...	275,232	11,087,690	8,351,000	2,736,690	11,235,170
1957 ...	127,752	12,500,922	9,360,000	3,140,922	12,209,471
1958 ...	419,203	—	—	—	—

Note.—The above amounts are cash actually received or paid out.

The amount drawn from Parliamentary Votes into the Fund during the Forest Year ended 30th September, 1957 was £9,360,000, made up of £4,710,000 from the vote for the financial year ended 31st March, 1957 and £4,650,000 from the vote for the financial year ending 31st March, 1958. Other receipts, mainly from sales of forest produce, totalled £3,140,922; payments made amounted to £12,209,471.

FINANCIAL TABLES

Appendix 1 is a statement of the expenditure to be accounted for after taking into account all items proper to a statement of income and expenditure as distinct from cash receipts and cash payments; Appendix 1 also shows the allocation of the expenditure in a summary of activities. Each activity is shown in greater detail in the appropriate appendix following Appendix 1,

with comparative figures for the previous year. In Appendix 3 (Forestry Operations) it should be noted that the cost of raising the plants used in the formation and maintenance of plantations is included under these heads and that the amount shown against each heading is direct expenditure comprising direct wages, charges for the use of departmentally owned vehicles and machines, materials and contract services. Overhead expenses consist of labour overheads (mainly paid holidays, wet time, sick pay and national insurance), local supervision (salaries and expenses of foresters), estate expenses (maintenance of buildings, rent and other charges) and administrative and control overheads (salaries and expenses of district officers and conservancy staffs and provision for pensions and gratuities); overhead expenses have been allocated as appropriate to the various activities reported in Appendices 2 to 7.

These Appendices appear on pages 59 to 61.

ACQUISITION AND UTILISATION OF LAND

The total area of land acquired through the Forestry Fund, under the Forestry (Transfer of Woods) Act, 1923, and by gifts from private persons, less disposals, was 2,253,800 acres. In many acquisitions of land it is unavoidable that in addition to plantable land there is included some rough grazing and agricultural land which it is not intended to plant, and also land unsuitable for planting on account of soil conditions, exposure or other reasons; it may also be necessary to include areas of standing woods. Table 3 below gives the present or intended future use of the land so far acquired.

UTILISATION OF LAND

Table 3

At 30th September

Thousand acres

	Great Britain	England	Scotland	Wales
Total Acquired	2,253·8	694·1	1,230·1	329·6
Forest Land: Total	1,443·5	537·8	642·8	262·9
Acquired Plantations	83·2	51·6	24·9	6·7
Planted by Forestry Commission	1,037·8	386·2	457·0	194·6
To be planted	322·5	100·0	160·9	61·6
Other Land: Total	810·3	156·3	587·3	66·7
Nurseries	2·1	0·8	0·8	0·5
Rough Grazing and Agricultural Land	474·3	68·0	355·4	50·9
Forest Workers Holdings	12·9	6·3	4·3	2·3
Unplantable and Miscellaneous	321·0	81·2	226·8	13·0

Of the 2,253,800 acres of land acquired to date, 1,443,500 acres are classed as Forest Land, of which 1,037,800 acres are plantations made by the Commission, 83,200 acres are acquired plantations, and 322,500 acres are land which will be planted in due course. The land to be planted is held in the three countries as follows: England, 100,000; Scotland, 160,900 acres; Wales, 61,600. It should be noted that all land to be planted is not immediately available for a number of causes and also that it is the policy of the Commission to let as much as possible for grazing until it is actually required. As will be seen from the table above, "Other Land", that is land which it is not intended to plant includes 474,300 acres of rough grazings and agricultural land along with 321,000 acres of land unsuitable for planting.

Land not placed at the Disposal of the Commissioners

The statement of land utilisation given in the previous table includes land under the management of the Ministry of Agriculture and of the Department of Agriculture for Scotland. Details of this land are given in Table 4 below.

LAND NOT PLACED AT THE DISPOSAL OF THE COMMISSIONERS

Table 4 At 30th September Acres

	Great Britain	England	Scotland	Wales
Total ...	375,044	60,392	280,451	34,201
Forest Land ...	30,860	3,482	26,140	1,238
Rough grazing, agricultural, unplantable and miscellaneous ...	344,184	56,910	254,311	32,963

The land in the charge of the Agricultural Departments at the end of the year was 375,044 acres of which 30,860 acres have been classified as forest land, most of which will be transferred to the Commissioners for planting in due course.

Number of Forests

The Commission now has 513 forest units, of which 221 are in England, 206 are in Scotland and 86 in Wales. These totals include a small number of central nurseries which have little or no woodlands attached. The name and area of individual forests are listed by Conservancies in Appendices 10 to 13 on pages 65 to 76, and their approximate positions are shown on the outline maps of Conservancies on pages 78 to 79.

The changes which have taken place during the year, in summary, are as follows: nine new forest units, of which two were formerly parts of older forests, were constituted during the year, while six previously existing units were merged with neighbouring forests; the net result is an increase of three forest units. The additional forests formed during the year are listed below.

ENGLAND

Bingley, Yorks.

Beechwood, Beds. and Herts. (formed from part of Chilterns Forest).

Blackdown Woods, Dorset.

Huntingdon, Hunts. and Herts.

Brooke Woods, Norfolk, was merged with Waveney Forest.

SCOTLAND

Leapmoor, Renfrewshire.

Naver, Sutherland.

Upper Nithsdale, Dumfries-shire.

The following forests were merged:—Corrennie with Pitfichie; Craigeiburn with Greskine; Leithope with Wauchope; Loch Ericht with Strathmashie; and Twiglees with Castle O'er.

WALES

Arfon, Caerns.

Breidden, Mont. and Salop. (formed from part of Mathrafal Forest).

Land Acquired during the Year

The area of land acquired, including land to which entry was secured prior to the legal procedure being completed, amounted to 92,010 acres, of which 57,793 acres were classed as plantable. Disposals and adjustments totalled 14,809 acres, made up of 1,678 acres classed as plantable, 8,593 acres as unplantable and 4,538 acres of grazing and agricultural land.

The net additional area of plantable land, including standing woods, was thus 56,115 acres, which is within a hundred acres or so of last years figure, but again it falls below the area planted during the year. The difference, excluding the area of standing woods acquired, amounts to 4,356 acres. The rate of acquisitions in relation to the planting programme is discussed earlier in this Report (page 7).

Table 5 below gives an analysis by countries of the types of plantable land acquired during the year.

	Total	Bare Land	Land previously under a Tree Crop	Standing Woods
Great Britain	56,115	34,563	18,962	2,590
England	18,680	5,416	11,562	1,702
Scotland	22,493	17,107	4,845	541
Wales	14,942	12,040	2,555	347

From the analysis given above it will be seen that the net addition of 56,115 acres is made up of 34,563 acres (62 per cent.) of bare land, 18,962 acres (34 per cent.) of land previously under a tree crop, that is felled or scrub woodland, and 2,590 acres (4 per cent.) of standing woods. Compared with the previous year these percentages show little change; the percentage of bare land, however, did increase by three per cent. at the expense of land previously under a tree crop.

Progress of Acquisition of Plantable Land

The acreage of plantable land acquired from 1920 onwards by lease or feu and by purchase is given in Table 6 below.

Period	Total	By Lease or Feu	By Purchase
Total 1920-1957	1,387,695	458,598	929,097
1920-29	310,230	156,759	153,471
1930-39	344,757	60,057	284,700
1940-49	255,725	81,536	174,189
1950	60,996	26,423	34,573
1951	56,113	24,624	31,489
1952	53,604	15,718	37,886
1953	53,635	20,742	32,893
1954	77,149	22,049	55,100
1955	61,076	20,456	40,620
1956	58,295	13,588	44,707
1957	56,115	16,646	39,469

* Excluding Crown Woods transferred to the Commissioners under the Forestry (Transfer of Woods) Act, 1923.

Land Acquired to Date

Table 7 below gives a summary statement of land acquired to date classified into Plantable Land (including land already planted before acquisition) and Other Land. This table also shows separately the amounts acquired by lease or feu, and by purchase. The acreages shown exclude Crown Woods amounting to 118,000 acres (of which some 60,000 acres are plantable) transferred to the Commissioners under the Forestry (Transfer of Woods) Act, 1923 but include areas amounting to 7,400 acres to which entry was secured in advance of the completion of the legal procedure.

SUMMARY STATEMENT OF LAND ACQUIRED*

Table 7		At 30th September				Acres		
		Total	By Lease or Feu			By Purchase		
			Total	Plant-able†	Other	Total	Plant-able†	Other
Total:								
Great Britain		2,135,752	618,611	458,598	160,013	1,517,141	929,097	588,044
England ...		593,889	241,297	216,788	24,509	352,592	290,280	62,312
Scotland ...		1,217,623	277,597	160,576	117,021	940,026	460,480	479,546
Wales ...		324,240	99,717	81,234	18,483	224,523	178,337	46,186

* Excluding Crown Woods amounting to 118,000 acres (of which some 60,000 acres are plantable) transferred to the Commissioners under the Forestry (Transfer of Woods) Act, 1923; but including land to which entry was secured prior to the legal procedure being completed.

† Including planted land.

From the above table it will be noted that a total of 2,135,752 acres have been acquired by lease or feu and by purchase. Of this amount 1,387,695 acres were classified on acquisition as plantable land, but this classification may be altered in the light of experience and local developments and other factors, and the present or intended use of the land as at 30 September, 1957, is given in Table 3 on page 24.

The average price paid during the year for plantable land, excluding timber and buildings, was £3 12s. 6d. per acre; in the previous year it was £3 4s. 2d. This average represents a considerable range of prices related to the quality, situation of the land and its value to the Commission. Prices have ranged from the extremes of 15s. 7d. per acre for 32 acres up to £15 per acre for 12 acres which had already been ploughed and were ready for planting. The general run of prices paid lay between £2 to £5 per acre, between which 74 per cent. of the land was purchased, with 43 per cent. between £3 to £4 per acre.

The average rent paid for plantable land was 2s. 7d. per acre; the comparable figure for the previous year was 2s. 9d. The rents negotiated ranged from 1s. 5d. to 5s. 5d. per acre; the former in respect of 152 acres in three discontinuous areas, the latter for 5½ acres which it was advantageous to secure for access and fire protection. Of the areas leased during the year 71 per cent. were obtained at rents between 2s. 0d. and 3s. 6d. per acre.

Expenditure during the year on the purchase and lease of land, including salaries and expenses of the acquisition staff, legal expenses, outgoing valuations, tithe and stipend redemptions, was £336,000. The value of

the land disposed of was £103,000, giving a net expenditure of £233,000, (Appendix 2, page 59). It should be noted that expenditure during the year cannot be directly related to the area shown in the tables above as acquired during the year as they include land to which entry was secured pending financial settlement.

FORESTRY OPERATIONS

The closing months of 1956 were generally dry, except in the north-west and west of Scotland where more than the average amount of rain was recorded. Temperatures fell at the end of November, but December was mild except for a short snowy spell round Christmas. The opening months of 1957 were mild with more than the average amounts of rain in a variable pattern. January brought much rain to most of Scotland and Wales; in February the wetter parts of the country were south-east England, Wales and south-east Scotland. Destructive gales were experienced in Wales and in Scotland. Rainfall was normal for March and it was generally mild. These conditions permitted good progress to be made with the usual winter work of preparation of ground for planting, planting and nursery work. April brought dry and sunny weather with however fewer outbreaks of fire than usual, a result of the mild winter favouring the early greening of rides and ground vegetation. May brought variable weather, followed by a flaming June when the number of forest fires soared well above what is generally expected in that month. This dry spell was succeeded by a wet July, August and September, during which the control of weeds in plantations and nurseries was a troublesome business. On the whole the weather was not particularly favourable for growth.

The several branches of forest work are discussed below under the headings of Forest Nurseries, Plantations, Protection and Preparation of Produce. Under Forest Nurseries are grouped the collection, supply and sowing of seed, sowing and the tending of the young trees required for the formation of plantations. Plantation work covers fencing, clearing of ground, ploughing, draining and the planting out of the young trees; it also includes the after-attention which plantations must receive, namely, weeding, beating up and the maintenance of ditches and fences etc. Protection includes measures to safeguard plantations from fire, and from damage by injurious animals, insects and fungi. Preparation of produce includes the thinning and clear felling of plantations and also the extraction and preparation of material for sale and for forest use.

Expenditure on Forestry Operations during the year amounted to £8,408,000, less £2,515,000 in respect of timber and other forest produce and an increase in stocks of felled timber and other forest produce. Compared with the previous year there has been an increase of £635,000 in our expenditure and an increase of £163,000 in respect of sales and the value of stocks. Details and comparative figures for 1956 are given in Appendix 3, page 59.

Forest Nurseries

Seed Supply

The Commissioners' policy is to collect from their own woods and, by arrangement with owners, from private woodlands also, as much as possible of the seed required to provide the trees necessary for their planting programme. The amount of seed produced by trees varies from year to year, but it is usually possible to meet most of the requirements of the broad-leaved species such as oak, ash, sycamore and beech; the beech crop, however, is intermittent and from time to time it is necessary to seek

supplies from the Continent. It has not been necessary to do so this year. For supplies of conifer seed, Scots pine and some of the less greatly used species, such as Lawson cypress, are the only ones which can be relied upon to provide all our requirements. For supplies of other species such as Corsican pine, lodgepole pine, Japanese larch, Douglas fir, Sitka spruce, and *Tsuga heterophylla*, recourse must be made abroad. Though considerable areas of these species have been planted in this country, large enough areas have not yet reached the seed bearing stage. The recently compiled register of seed sources enables collections to be made from the most suitable provenances.

Home Collected Seed

Throughout England and Wales, conifers with the exception of *Thuja plicata* and Lawson cypress have given a poor yield of cones. In Scotland, except for Scots pine and Corsican pine, the conifers have produced good crops of cones. The outstanding feature of the year was a very welcome and abundant crop of beech seed; the production of acorns has been variable and generally poor. Sycamore seed has been abundant, and in places good, while Spanish chestnut has been poor.

The conifer collection amounted to 13,309 bushels of cones of which over 11,000 bushels were gathered from Scottish sources. The outstanding crop was European larch, 3,915 bushels, most of which came from the North and East Conservancies, Scotland. Another notable yield was Norway spruce, 1,933 bushels, of which 1,472 bushels were collected between the four Scottish Conservancies where the crop of cones was evenly good. Japanese larch also gave a good crop, 1,372 bushels, and again most of this was collected in Scotland. Hybrid larch also gave an outstanding crop of cones and 1,726 bushels were gathered, most of this in East Conservancy, Scotland. The abundance of these crops made it possible to confine collections to the best stands and the yield of seed per bushel of cones was excellent. Of the less common species, 70 bushels of cones of *Picea omorika* were collected from Inchnacardoch and Glen Urquhart forests; this yielded seed at the rate of 13 oz. per bushel.

The quantity of cones that passed through the Commission's seed extraction establishments was 13,909 bushels, which yielded 13,277 lb. of seed.

The quantity of broadleaved seed collected was 219,910 lb., the major items being 143,763 lb. of beech, 69,467 lb. of acorns and 2,378 lb. of sycamore seed. After a series of poor years from the autumn of 1951, beech gave an abundant crop over most of England and southern Scotland; in Wales, north-west England and west and north Scotland there was little beech mast. Outstanding collections were; South West Conservancy, 55,000 lb.; South East Conservancy, 52,000 lb.; East Conservancy, 15,000 lb.; North East Conservancy, 12,000 lb. In the New Forest and in the South Conservancy, Scotland, collections of 4,000 each were made. It was unfortunate that wet weather in the autumn made the harvesting and storing of such large quantities a difficult matter, and much was sown in the autumn.

Imports of Seed. The Commission has continued to make bulk imports of seed of Douglas fir, Sitka spruce, Japanese larch and Corsican pine to cover its own and also private and trade needs. For the first time for some years, there were ample supplies of *Tsuga* and *Thuja* seed from North America; requirements of Sitka spruce were also fully met. An early snowfall hindered the collection of a number of species, while supplies of seed of lodgepole pine, *Abies procera (nobilis)* and Douglas fir were

particularly poor; requirements of *Abies grandis* were only partially available. As, however, supplies of the main species were available from store, the requirements of the Commission and also those of the nursery trade and woodland owners were met.

No European larch of satisfactory origin was available, and it was a poor year for Corsican pine and for Norway Spruce. Supplies of Japanese larch seed were satisfactory.

Of the broadleaved species, sessile oak was difficult to obtain and no red oak was available from the Continent. Sufficient supplies of Spanish chestnut were obtained.

A detail of seed obtained from abroad is given in Table 8 below.

IMPORTED SEED

Table 8 Year ended 30th September

Species	Quantity (lb.)	Origin
All Species: Total ...	68,391	—
Coniferous: Total ...	17,205	—
Corsican pine ...	1,201	Corsica
Lodgepole pine ...	310	Oregon, U.S.A.
Lodgepole pine ...	477	British Columbia
Pinus mugo (rostrata) ...	40	Austria
Pinus nigra ...	90	Austria
Pinus peuce ...	85	Macedonia
Pinus ponderosa ...	30	British Columbia
Japanese larch ...	3,981	Japan
Douglas fir ...	2,000	Washington, U.S.A.
Norway spruce ...	501	Denmark
Norway spruce ...	400	Austria
Sitka spruce ...	4,012	Queen Charlotte Island, British Columbia
Sitka spruce ...	60	Alaska
Abies grandis ...	1,180	Oregon, U.S.A.
Abies amabilis ...	46	Washington, U.S.A.
Abies concolor ...	115	Colorado, U.S.A.
Abies lowiana ...	111	California, U.S.A.
Abies nordmanniana ...	118	France
Abies procera (nobilis) ...	504	Oregon, U.S.A.
Tsuga heterophylla ...	1,050	British Columbia
Thuja plicata... ...	500	Queen Charlotte Island, British Columbia
Sequoia sempervirens ...	100	California, U.S.A.
Sequoiadendron giganteum ...	50	California, U.S.A.
Cryptomeria japonica ...	30	Japan
Cupressus macrocarpa ...	21	New Zealand
Other conifers ...	193	Various
Broadleaved: Total ...	51,186	—
Oak (sessile) ...	44,800	Austria
Spanish chestnut ...	6,200	France
Other broadleaved ...	186	Various

Sales of Seed. The quantity of conifer seed sold to the nursery trade was slightly more than in the previous year, 5,354 lb. as against 4,705 lb. The quantities of the main species, Scots pine, Corsican pine, Japanese larch and Douglas fir did not differ greatly from those of the previous year. There was, however, a greater demand for seed of Sitka spruce and *Abies grandis*; other species of which the quantities were greater included *Abies procera* (*nobilis*), *Tsuga heterophylla*, and *Thuja plicata*.

Private owners' requirements were much on the same lines as in the previous year; Corsican pine was in considerably less demand, but there were greater purchases of the silver firs; the total amounted to 116 lb.

Broadleaved tree seed sold to the nursery trade amounted to 7,700 lb., comprising 7,500 lb. of beech seed, 140 lb. of ash and 84 lb. of sycamore seed. No woodland owners purchased broadleaved tree seed.

Nursery Work

Weather conditions on the whole were favourable for nursery work, though in some districts of Scotland and Wales work was held up by wet periods. Lifting and lining-out were however completed in good time. To deal with the large quantities of beech seed which were available, much of it was sown in the autumn soon after collection, while the conifer sowings as usual were made in the early spring. Both the newly lined out plants, particularly the smaller ones, and many of the newly germinated seedlings suffered in some degree from the dry weather in April, conditions which over much of the country prevailed till the end of June. The generally wet weather in July and August was beneficial and though yields were, perhaps, low the quality of most species was fair to good. Weed growth in many of the agricultural type nurseries was heavy and troublesome.

Nursery Area. The total area under forest nurseries was increased by 39 acres to 2,151 acres of which 446 acres are of the heathland type. In England and Wales the increases were 43 acres and 12 acres respectively resulting from the bringing into cultivation of fresh nursery sites so that areas which have become unsatisfactory on account of weeds and other causes may be abandoned. In Scotland the nursery area was reduced by 16 acres.

Use of Nursery Ground. A rotation of cropping is observed in the nurseries and of the total area of 2,151 acres of nurseries, seed beds occupied 462 acres (22 per cent.), transplants covered 599 acres (28 per cent.), fallow and land under green crops occupied 694 acres (32 per cent.), the balance being made up of the area covered by roads, loading places and buildings. The only change of note, compared with the previous year, is an increase by 148 acres of the area under seedbeds accounted for by the need to make good use of the abundant crop of beech seed. The disposition of the nursery ground in each of the three countries between seedbeds, transplant lines and fallow etc. is given in Table 9 below.

USE OF NURSERY GROUND

	Total	Seedbeds	Transplant Lines	Fallow and Green Crops	Other
Great Britain	2,151	462	599	694	396
<i>Percentage of total area...</i>	<i>100</i>	<i>22</i>	<i>28</i>	<i>32</i>	<i>18</i>
England	827	209	207	270	141
Scotland	817	150	231	295	141
Wales	474	100	152	120	102
Research Nurseries	33	3	9	9	12

Seed Sown. The quantity of conifer seed sown was reduced to 16,249 lb., which is 1,319 lb. less than in the previous year but still includes substantial sowings to provide seedlings for disposal to the nursery trade. The sowing of broadleaved seed was increased by over 91,000 lb., and amounted to

210,910 lb. of which 101,000 lb. were acorns and 100,000 lb. were beech seed. As much of the beech seed was collected under wet conditions which give rise to difficulties in storing, most of it was sown in the autumn. The results of these sowings have been variable, better on the lighter soils, less good on the heavier ones. Yields were further reduced by severe late spring frosts in spite of protective coverings.

Stocks of Seedlings and Transplants. At the end of September the nurseries held 489·2 million forest trees of all species and categories, comprising 140·8 million transplants and 348·4 million seedlings. Compared with the previous year, transplants were fewer by 35·6 million, while seedlings had increased by 92·2 million. The stocks held in the three countries and in the Research Nurseries are given in Table 10 below.

STOCKS OF TRANSPLANTS AND SEEDLINGS

	Total	Transplants	Seedlings
Great Britain	489,205	140,814	348,391
England	147,158	35,808	111,350
Scotland	242,512	67,840	174,672
Wales... ..	97,528	36,702	60,826
Research Nurseries	2,007	464	1,543

Sales of Nursery Stock. There was again quite a considerable increase in the quantity of seedlings and transplants sold to the nursery trade. The quantity so disposed of has been steadily increasing from 11½ million plants in 1955 to over 15½ million in 1956, and in the present year, was close to 21 million, of which 9 million were seedlings and 12 million were transplants. The species most in demand were Scots pine, Japanese larch, Douglas fir, Sitka spruce and Norway spruce. The actual quantities of these and other species making up the 21 million are given in Table 11 below.

Expenditure and Receipts. Expenditure on nurseries including the purchase and collection of seeds, was £632,000 ; sales of seed and nursery stock brought in £113,000. The amounts for the previous year were £584,000 and £73,000 respectively

SALES OF NURSERY PLANTS

ALL SPECIES: TOTAL	20,977
Coniferous: Total	20,843
Scots pine	7,842
Corsican pine	185
European larch	390
Japanese larch	4,325
Douglas fir	3,622
Norway spruce	1,020
Sitka spruce	2,572
Other conifers	887
Broadleaved: Total	134
Ash	1
Oak	50
Beech	62
Other broadleaved species	21

Plantations

Weather conditions were favourable for the preparation of ground for early and mid-winter planting, and in most districts planting was finished in good time. This favourable start was somewhat marred by the drought conditions which set in during March and lasted till June. During these months the young plantations, most of which had flushed early, were subjected to prolonged periods of drying winds, high day temperatures as well as a number of night frosts in May and June. The species which suffered most were larch, beech, Douglas fir and *Tsuga heterophylla*. These critical conditions were however ended by the heavy rainfall of July and August. These wet months nevertheless brought their own difficulties with heavy weed growth. With these vicissitudes, in general the growth of the young plantations was not so good as usual.

The area planted during the year again suffered a reduction, the reasons for this are discussed earlier in this Report (page 8). In brief, this trend is the inevitable consequence of the low level of acquisition of plantable land, not only in relation to the planting programme but also in regard to location.

The total area planted was 57,881 acres, as against 62,400 acres in 1956. The amounts planted in the three Directorates were: England, 19,332 acres (33·4 per cent.) ; Scotland 26,696 acres (46·1 per cent.) ; Wales, 11,853 acres (20·5 per cent.). England and Scotland show reductions of 1,490 acres and 3,055 acres respectively, as compared with last year's results, while Wales has increased by a small amount, namely 26 acres. Details of the amounts planted and underplanted in each Conservancy are given in Table 12 while the planting done in individual forests is given in Appendices 11 to 13 on pages 65 to 76).

AREAS PLANTED AND UNDERPLANTED

Country or Conservancy	Planted	Under-planted	Country or Conservancy	Planted	Under-planted
GREAT BRITAIN	57,881	685	SCOTLAND: Total ...	26,696	139
ENGLAND: Total ...	19,332	299	Conservancy:		
Conservancy:			North	7,157	13
North-West ...	3,788	94	East	6,306	39
North-East ...	7,079	22	South	8,961	52
East	2,945	145	West	4,272	35
South-East ...	2,503	7	WALES: Total ...	11,853	247
South-West ...	2,247	11	Conservancy:		
New Forest ...	513	18	North	6,503	240
Dean Forest ...	257	2	South	5,350	7

Table 13 below separates the planting during the year into afforestation, that is the planting of ground which has not within recent times carried a forest crop, and replanting—that is the re-stocking of a woodland area from which the previous crop has been removed.

AFFORESTATION AND REPLANTING

	Great Britain	England	Scotland	Wales
Total Planted	57,881	19,332	26,696	11,853
Afforested	33,617	8,651	17,588	7,378
Re-planted	24,264	10,681	9,108	4,475

From the preceding table it will be seen that the year's planting of 57,881 acres comprised 33,617 acres (58 per cent.) afforested and 24,264 acres (42 per cent.) replanted; this latter figure includes 1,758 acres replanted after the destruction of the previous crop by fire. The proportion of afforestation to replanting shows a small increase of 4 per cent. in the area replanted, over last year's figures.

The allocation of the year's planting between conifers and broadleaved species was 52,845 acres of conifers and 5,036 acres of broadleaved trees. This represents proportions of 91 per cent. and 9 per cent. respectively, which have varied little over the past few years. An analysis of the plantations made during the year in each Conservancy to show the areas afforested and replanted, the acreage planted with conifers and broadleaved species respectively, and also the main species used, is given in Appendix 8 on pages 62 and 63.

Plants used for Planting and Beating-up

A total of 112 million young trees were planted in Commission forests during the year; 88 million were used in the formation of new plantations and 24 million for beating-up, that is for replacing failures where required in the more recently formed plantations. The number used for planting is naturally less than in previous years on account of the reduction in the planting programme. The numbers used for beating-up are, however, greater than in previous years on account of the need to make good failures resulting from spring droughts which were more than usually severe in 1955 and 1956.

The proportions in which the main species were used for planting and beating-up are given below:

	<i>Per cent.</i>		<i>Per cent.</i>
Sitka spruce	21	Douglas fir ...	5
Scots pine	18	Beech	4
Lodgepole pine	16	Oak ...	3
Japanese larch	12	European larch	2
Norway spruce	8	Other conifers ...	4
Corsican pine	5	Other broadleaved species ...	2

Compared with previous years changes have been slight. The main species being used continue to be Sitka spruce and Scots pine. Greater use in the past few years has been made of lodgepole pine on account of its value as a pioneer and a nurse species; this also indicates that more exposed and difficult sites are now being planted.

The main species used in each Conservancy are given in Appendix 8, page 62, and a summary by species is given in Appendix 9 on page 64.

Progress of Planting to date

AREAS PLANTED TO DATE

Table 14

Years ended 30th September

Acres

			Total	Afforested	Re-planted
Total, 1920-1957	...	...	1,084,767	740,105	344,662
1920-29	...	...	138,271	101,976	36,295
1930-39	...	...	230,607	174,428	56,179
1940-49	...	...	217,122	149,868	67,254
1950	...	...	53,737	37,355	16,382
1951	...	...	57,164	38,018	19,146
1952	...	...	61,632	39,656	21,976
1953	...	...	67,610	42,665	24,945
1954	...	...	70,437	43,028	27,409
1955	...	...	67,906	40,902	27,004
1956	...	...	62,400	38,592	23,808
1957	...	...	57,881	33,617	24,264

The total acreage of plantations formed by the Commission up to the end of September, 1957 was 1,084,767 acres. Not all of this is still standing as there have been losses from fires and gales, as well as fellings and disposals. The actual area of plantations at the end of the year was 1,037,800 acres, excluding acquired plantations (see Table 3, page 24). Included in the 344,662 acres shown above as replanted, are 22,020 acres which were replanted after destruction by fires.

Expenditure. Direct expenditure on preparatory work and the formation of plantations was £1,955,000 ; this includes the cost of clearing the ground and ploughing if necessary, making drains, putting up fences and the actual work of planting, it also includes charges for the provision of plants. Expenditure on the maintenance of plantations was £1,409,000 ; this covers the cost of beating-up and underplanting, weeding and cleaning plantations, the maintenance of ditches and fences, and also charges for the plants used. For comparison expenditure in the previous year was: Preparatory work and formation of plantations, £1,866,000 ; maintenance of plantations, £1,165,000 ; (Appendix 3, page 59).

Forest Protection

Direct expenditure on forest protection was £474,000 (Appendix 3, page 59) ; of this £283,000 was expended on fire protection, including the making and maintaining of fire lines, fire patrols and the actual work of fire fighting ; the remainder of this expenditure, £191,000, was in respect of other protective works such as the destruction of rabbits, squirrels and vermin, and also measures taken against injurious insects and fungi.

Fire Protection

As a contrast to the previous year, when the area of plantations destroyed by fire was among the highest recorded, the area lost in 1957 was among the lowest recorded. There were 925 outbreaks of fire but only 122 acres were destroyed. The spring fire danger period was late in developing, due to the mild winter and an early spring bringing about an early flushing of the ground vegetation. The number of fires reported in February and March was very low ; a sunny April brought about a sudden jump in numbers ; a variable May reduced the danger somewhat, while as a result of the sunny and warm weather in June, the numbers of fires soared well above the average for that

month ; July, August and September brought no recurrence of the fire danger. Of the 925 outbreaks during the year, 86 per cent. were extinguished before they damaged plantations ; the figure for the previous year was 83 per cent. No large fires occurred during the year ; there were four involving areas of between 5 to 10 acres each and three of over 10 acres in extent, the largest being one of 15½ acres. The financial loss was also low, £9,000. Table 15 gives a summary of the fires, their extent and the loss sustained for each of the six previous years.

NUMBER AND EXTENT OF FOREST FIRES, 1951-1957

Table 15 Years ended 30th September

	Number of Fires	Area Burned (acres)	Assessed Damage £
1951	1,327	348	12,000
1952	1,130	455	16,000
1953	1,253	532	15,000
1954	1,344	390	16,000
1955	2,834	276	19,000
1956	2,045	4,078	175,000
1957	925	122	9,000

CAUSES OF FOREST FIRES

Table 16 Year ended 30th September

	Number of Fires	Area Burned (acres)
Total	925	122
Railways	500	4
Adjoining Land	144	19
General Public	149	51
Commission Employees	12	6
Incendiarism	9	1
Miscellaneous	34	14
Unknown	77	27

The classification given above of the causes of the 925 fires that occurred during the year shows that as in previous years railways have been the cause of the greatest number of fires. The 500 fires from this cause accounted for 54 per cent. of all fires, but resulted in a loss of 4 acres only, or 3 per cent. of the total area of plantations burned. Fires coming in from adjoining land were 144, or 15 per cent. of the total, and were responsible for the loss of 19 acres (16 per cent.), while fires caused by the general public and fires from unknown causes together amounted to 226 (24 per cent.) and resulted in the loss of 78 acres (64 per cent.). Among other causes of fires, it is recorded that during a thunderstorm over Wareham Forest in Dorset, three lightning strikes caused simultaneous fires.

Protection against Damage by Animals, Birds, Insects and Fungi

It is disappointing to report that everywhere rabbits are returning to areas from which they had disappeared as a result of myxomatosis. A mild winter and an abundance of food favoured a rapid increase in numbers, which in some measure was checked by the resurgence of myxomatosis in many parts of the country. The increase in the rabbit population is reflected in the

numbers destroyed by Commission warreners, who accounted for 60,600 rabbits, an increase of close on 50 per cent. over the 41,000 killed in 1956. As a consequence of the increase it will be necessary in many parts to enclose new plantations with rabbit netting and to maintain existing rabbit netting fences round older areas to prevent them becoming breeding grounds. Compared with 1956 the numbers killed in England increased from 14,000 to 23,600, in Scotland from 24,000 to 32,800 and in Wales from 3,000 to 4,200.

Hares have again increased in numbers and 24,100 were taken as against 20,700 in 1956. As in previous years the greatest numbers were killed in the East Conservancy, Scotland where 13,500 of the above total were accounted for. In England, 3,400 were caught, most of them in the East Conservancy where they have apparently declined in numbers somewhat but still continue to be troublesome.

The heavy production of seed, particularly of beech, the mild winter and dry spring resulted in a considerable increase in the numbers of grey squirrels, and on Commission areas 42,900 were destroyed as against 20,600 in the previous year. In England, 37,500 out of the above total of 42,900 were killed, and as in past years most of these were found in the New and Dean Forests and in the South-East Conservancy of England. These three regions accounted respectively for 16,700, 5,500 and 8,500 squirrels. In the South-West Conservancy, England, 4,000 were destroyed. In Scotland, the numbers taken also increased particularly in the South and West Conservancies ; none were reported from the North Conservancy. In Wales, a considerable increase was reported, along with a further spread westwards.

In the interests of our tenants and neighbours, 5,094 foxes and cubs were killed ; last year the total was 5,523.

Voles and long-tailed field mice have been the cause of considerable damage to young plantations in a number of areas throughout Britain. In South-West Conservancy, England, some young beech suffered badly and stems up to one inch in diameter were gnawed through and larger stems were girdled ; some damage was also sustained in nursery transplant lines. In England, voles were at a high level of population, and in addition to causing damage to trees, have, there is little doubt been the prime cause of failure to get natural regeneration of beech in many areas. In Scotland, voles were also troublesome, particularly in parts of East and South Conservancies ; numbers were thought to be decreasing in the West Conservancy. Reports of infestations have also been received from the North and South Conservancies of Wales, where many plantations up to four years old suffered on a considerable scale. The species which took most damage were beech, red oak and native oaks ; conifers also suffered including Japanese larch and Sitka spruce.

The roosting of starlings at two forests, Halwill in Devon and Wilsey Down in Cornwall, has so fouled considerable areas of Sitka spruce in the thicket stage that some thirty acres or so have been destroyed. Efforts to prevent the starlings using these roosts have not been successful.

Serious attention is being given to methods of controlling the spread of *Fomes annosus*, a fungus which causes butt rot and death of conifers. This fungus is manifesting itself in a number of forests, particularly in the drier parts of the county.

No great damage has been caused by insect pests. There have been widespread infestations of *Neomyzaphis*, the Green Spruce Aphis, but with no serious effects. The Pine Looper Moth, *Bupalus piniarius*, has been in evidence in a number of pine forests but only at Tentsmuir forest, in Scotland, was treatment by dusting resorted to. Details of the method are given under Forest Entomology on page 50.

Preparation and Sale of Produce

Thinning

The area of plantations thinned during the year—46,878 acres—represented an overall increase of 3,768 acres compared with the previous year. England and Wales showed increases of 3,059 acres and 1,861 acres respectively but in Scotland the thinning programmes were upset by the prior need for clearing up the damage caused by the gale of 4th February, 1957, in which 1½ million hoppus feet were blown down. As a result the total area thinned—13,902 acres—was 1,152 acres less than in the previous year.

Table 17 provides details by Conservancies of the areas thinned in 1956 and 1957.

TABLE 17		AREAS THINNED				
		Years ended 30th September				
				Acres		
		1956	1957			
		1956	1957			
GREAT BRITAIN: Total		43,110	46,878	SCOTLAND: Total ...	15,054	13,902
ENGLAND: Total ...		22,133	25,192	Conservancy:		
Conservancy:				North ...	2,777	2,141
North-West ...	5,398	5,786		East ...	6,374	6,939
North-East ...	2,362	4,023		South ...	1,936	1,421
East ...	7,274	7,649		West ...	3,967	3,401
South-East ...	1,263	1,348		WALES: Total ...	5,923	7,784
South-West ...	2,479	2,283		Conservancy:		
New Forest ...	1,596	1,760		North ...	3,346	4,819
Dean Forest ...	1,761	2,343		South ...	2,577	2,965

The area of young plantations in which thinnings were made for the first time increased from 14,456 acres in 1956 to 15,012 in 1957. The area of broadleaved plantations thinned—3,905 acres, corresponding to approximately 8 per cent. of the total, also showed an increase over the previous year.

There was a very marked increase in the area of thinnings worked by merchants. In 1955 the area was 6,878 acres (17 per cent. of the whole), in 1956 it was 12,173 acres (28 per cent.) and in the year under review 17,808 acres (38 per cent.). The most pronounced increase was in Wales where the proportion worked by merchants was 54 per cent. of the total compared with 27 per cent. in the previous year. In Scotland the proportion increased from 41 per cent. to 52 per cent., and in England from 20 per cent. to 26 per cent.

Over the country as a whole 34 per cent. of the area of first thinnings was worked by merchants, compared with 26 per cent. in 1956.

Clear Felling

The area clear felled was 6,504 acres—999 acres less than in the previous year. Of the total, 2,156 acres were high forest, 897 acres coppice and coppice-with-standards, and 3,451 acres scrub woodlands being cleared for replanting. Clear fellings in high forest, which include normal fellings of mature stands, the replacement of uneconomic areas, and fellings on new road alignments, are kept to the lowest consistent with good management.

Fellings by merchants represented 27.5 per cent. by area and 31 per cent. by volume of the total.

Table 18 below shows by Conservancies the areas felled in 1956 and 1957.

AREAS FELLED

	1956	1957		1956	1957
GREAT BRITAIN— Total	7,503	6,504	SCOTLAND—Total ...	880	1,140
ENGLAND—Total ...	4,398	4,103	Conservancy		
North-West ...	416	500	North	544	497
North-East ...	519	465	East	224	447
East	697	778	South	16	68
South-East ...	1,598	1,183	West	96	128
South-West ...	578	597	WALES—Total ...	2,225	1,261
New Forest ...	391	342	Conservancy		
Dean Forest ...	199	238	North	939	596
			South	1,286	665

Production and Disposal of Forest Products

The total volume of timber felled in Commission forests during the year was slightly below 20 million hoppus feet over bark ; England 9·7 million, Scotland 6·7 million, Wales 3·6 million (softwoods 16·7 million, hardwoods 3·3 million). Thinnings accounted for 15½ million hoppus feet and clear fellings for 4½ million, and of these amounts 5·65 million hoppus feet of thinnings and 1·42 million from clear fellings were felled by merchants, i.e. 35 per cent. of the total.

The upward trend in sales of standing timber and thinnings was maintained, the total volume sold—6·81 million hoppus feet—being nearly a million hoppus feet greater than the total for the previous year.

Throughout England and Wales there was a keen demand for softwoods ; in Scotland, however, difficulties in disposing of certain specifications of sawn mining timber and a recession in the boxwood trade led to a marked decline in sales of thinnings during the last few weeks of the year ; as a result the total volume of standing sales was 0·65 million hoppus feet lower than in 1956.

Comparative figures for the three countries are as follows :

Sales of Standing Timber and Thinnings

Millions of hoppus feet

	1956	1957	
England ...	1·76	2·33	+ ·57 (+ 32%)
Scotland ...	3·41	2·76	— ·65 (— 19%)
Wales ...	·67	1·72	+ 1·05 (+ 157%)

The first auction sales of standing thinnings in Commission plantations were held during the last quarter of the year. The first sale, held in South-West England Conservancy covered 18,950 hoppus feet of thinnings at Blandford Forest in Dorset ; at the second, held in South Wales Conservancy, 52,731 hoppus feet were offered. There was a fair attendance of merchants at both sales and the prices realised were satisfactory, one lot only being withdrawn at less than the reserve price. At the end of the year arrangements were being made to offer further parcels of timber for sale by auction.

During the year a number of long-term contracts were negotiated.

Prices for softwood timber and thinnings remained fairly steady throughout the year, though in some cases in England and in Wales they showed a tendency to harden. There was little demand for the lower grades of hardwoods and prices tended to drop.

Disposals of produce prepared from Commission fellings, including material used for forest and estate purposes, are given below with the previous year's figures for comparison :

	<i>Millions of hoppus feet</i>	
	1957	1956
Round Timber and Saw Logs	3.87	3.29
Telegraph, Transmission and other Selected poles ... ..	.09	.07
Mining Timber	2.75	3.17
Posts, Stakes and Unselected Poles	1.80	2.02
Pulpwood and Boardmill material	1.66	1.41
Firewood, etc	1.54	1.91
Sawn Timber ... ..	.11	.16

In England and Wales there was a good market for all specifications. In Scotland, however, there was a falling off in demand for sawn mining timber and boxwood logs during the last two months of the year.

The decrease in the production of mining timber is related to the increase in the volume of standing sales of conifer thinnings and to a higher production of saw logs.

Income and Expenditure

In the forest year under report, income from sales of standing timber amounted to £543,000 (£482,000 in the previous year). £1,606,000 (£1,580,000) was realised from other sales of produce ranging in variety from tree lengths sold at stump to finished products, e.g. pitprops, delivered to customers; minor produce, etc., which includes Christmas trees and sales of sundry produce, realised £122,000 (£106,000) : and material to the value of £128,000 (£109,000) was used within the Commission for fencing, estate work and other purposes. Stocks and work in progress increased during the year by £35,000 (£17,000). Recoveries in respect of damage to, and disposal of, plantations amounted to £43,000 (£50,000). Gross income thus amounted to £2,477,000 (£2,344,000).

Direct expenditure on thinning and clear felling operations, including the felling, preparation and despatch of produce, amounted to £1,182,000 (£1,205,000) (Appendix 3 page 59).

ROADS AND BRIDGES

Road work was undertaken at 219 forests ; 400 miles were completed with a further 313 miles under construction. These amounts are not strictly comparable with the work done in the previous year as a new classification to enable capital and maintenance charges to be uniformly allocated was brought into use. Roads regarded as completed are those which have been constructed or brought up to a standard appropriate to the use to which they will be put, so that only normal maintenance will be required to keep them at this standard. As will be seen from the number of forests at which roads were built, the length of each was small, and generally speaking most of the roads were extensions to open up areas about to be thinned.

The work done during the year in each of the three countries is given in Table 19 below.

FOREST ROADS
Year ended 30th September

	Length of Road (Miles)		Number of Forests at which work was undertaken
	Completed	Under Construction	
GREAT BRITAIN: Total ...	400	313	219
England	91	168	78
Scotland	175	117	102
Wales	134	28	39

Bridging had again to be undertaken on a considerable scale in Scottish forests, where 49 permanent bridges to take vehicular traffic were built; the total length amounted to over 1,100 feet. In addition a number of temporary bridges, including two suspension foot bridges with a total length of 190 feet, were made. In England a major bridging work was the construction of a 200 foot span suspension footbridge over the river Wye (See Plate 3).

Capital expenditure on roads and bridges was £1,407,000 (Appendix 2, page 59). Maintenance amounted to £209,000, in addition £52,000 was spent on the formation and maintenance of forest tracks; this expenditure is charged to forestry operations. Expenditure on these subjects in the previous year was: capital expenditure on roads and bridges £1,099,000; maintenance £165,000; forest tracks £45,000.

ESTATE MANAGEMENT

Properties in the charge of the Commission show the usual diversity associated with large estates. In addition to 1,123,100 acres of plantations and nurseries, other land in the charge of the Commission amounts to 755,700 acres; this includes 291,700 acres which will be planted in due course; the remainder comprises farms, forest workers holdings and other land which will not be planted. The number of lettable subjects, including easements and permissions, at the end of the year was 12,866. These are detailed by countries in Table 20 below.

TENANCIES
At 30th September

Description	Number			
	Great Britain	England	Scotland	Wales
Houses for Supervisors and Forest Workers	4,602	1,793	2,163	646
Foresters and Foremen's Houses... ..	880	391	322	167
Forest Workers Holdings	1,178	504	466	208
Forest Workers Houses	2,544	898	1,375	271
Other properties	4,364	1,831	1,632	901
Agricultural, with house	539	129	150	260
Agricultural, land only	1,639	662	599	378
Houses and other premises	800	434	240	126
Sporting lettings	1,386	606	643	137
Miscellaneous: Easements, permissions, etc.	3,900	2,069	1,434	397

From the foregoing table it will be seen that the number of houses and holdings provided for the forest staff is now 4,602 ; of these, houses for Foresters and Foremen number 880, and houses and holdings for forest workers total 3,722.

Other properties, under which are included farms, agricultural land, houses and other premises, together total 2,978 ; lettings of sportings numbered 1,386. Miscellaneous easements, permissions and the like totalled 3,900.

No significant changes have occurred during the year. The older types of cottages in remote districts are becoming increasingly difficult to relet when they fall vacant ; potential worker tenants invariably seek places with modern conveniences and main services with reasonably good access, and there is a good demand for the better holdings. Changes of tenants have not been above normal. The demand for sporting has generally increased and rents obtainable were slightly greater.

The disposal of subjects not required for forestry purposes has been continued ; properties disposed of have included farms, unequipped agricultural land, mansions with policies and cottages unsuitable for modernisation for our use.

Buildings

Progress with new housing has been slow and building costs continue to rise. To check this, possibilities of securing economies in design and specification are regularly considered. The number of new houses completed during the year was 60 ; 38 in England and 11 each in Scotland and Wales. In the previous year 94 were completed. The number under construction at the close of the year was 36, as against 48 in 1956. The new forest villages continue to develop. At the village of Ae, the Dumfries County Council have completed a terrace of six houses, and to enhance the general amenities, the widening of paths and the levelling and sowing of grass on the village green has been undertaken. At the villages of Kielder on the North Tyne and Byrness in Redesdale, and at Glentroll village in Kirkcudbrightshire, a number of garages for private cars have been provided. The Conservator for North-East England reports, in relation to the North Tyne group of villages, that it is most noticeable that many of the applications for houses come from people with relatives or friends already settled there. This is a good sign and no doubt helps greatly with their settling into a new environment.

A considerable number of older cottages have been improved and modernised ; this work has included the provision of piped water supplies, hot water systems, bathrooms and water-borne sanitation, and connection to electricity supplies. Normal repairs and maintenance in remote areas have had their difficulties, as in general contractors are not anxious to work in out-of-the-way places, and Commission estate workers, where maintained, have been fully occupied. From some parts however, it is reported that contractors are easier to interest and that favourable tenders have been secured. A number of poor houses and obsolete buildings past economical maintenance have been demolished. Capital expenditure on buildings including Forest Workers Holdings was lower, £406,000 as against £420,000 in the previous year (Appendix 2, page 59). Expenditure on repairs and maintenance was also less, £159,000 as compared with £165,000. Income from rents and royalties was greater by £20,000 and amounted to £235,000.

PRIVATE FORESTRY

Expenditure on services to woodland owners during the year was £821,000. The greater part of this expenditure was in respect of payments made under the Dedication Scheme, which totalled £441,000; payments made for planting done outside the Dedication Scheme amounted to £94,000, of which Small Woods Planting Grants accounted for £61,000. Other payments made included: Thinning Grants, £47,000; Scrub Clearance Grants, £47,000; Grants to Co-operative Societies, £2,000; payments for the destruction of grey squirrels, £27,000. The expenses of administration, including advisory services, was £160,000. From Appendix 4, page 60, it will be seen that, excluding the cost of administration and advisory services which decreased by £18,000, payments have increased by £96,000, mainly as a result of the increase in planting in Dedicated Woodlands, Small Woods and Approved Woods. The level of other payments remained much as in the previous year, except for the bonus paid for destroying grey squirrels, which increased by £12,000.

The Dedication Scheme

As discussed earlier (page 10) the area now being planted annually by woodland owners shows that there is a progressive interest in extending the area of young plantations. The progress in dedication has not been so steady but in the present year the trend was upwards.

During the year, 141 estates with a woodland area of 40,100 acres were dedicated; an examination of Table 21 below shows that a greater area than in the previous year has been accepted for dedication, most of the increase being in England.

As an indication of future progress, plans of operations put forward by 152 estates in respect of 46,400 acres of woodlands had been agreed and for most of these the dedication deeds were being prepared; last year the corresponding figures were 168 estates with 59,700 acres of woodland. In addition, at the end of the year, 188 estates had the preparation of plans of operations in hand for 72,000 acres; a betterment of last year's position when there were 143 estates preparing plans for 56,000 acres.

The total area now dedicated amounts to 485,436 acres; progress to date by countries is given in Table 21 below.

PROGRESS OF DEDICATION

Table 21

Years ended 30th September

	Great Britain		England		Scotland		Wales	
	Number of Dedications	Area (acres)	Number of Dedications	Area (acres)	Number of Dedications	Area (acres)	Number of Dedications	Area (acres)
Total, 1948-57	1,133	485,436	711	231,564	333	234,615	89	19,257
1948-52 ...	252	149,144	118	51,656	116	93,223	18	4,265
1953 ...	227	76,810	143	42,963	61	28,255	23	5,592
1954 ...	253	116,667	180	60,611	61	54,393	12	1,663
1955 ...	143	67,650	103	38,350	34	27,669	6	1,631
1956 ...	119	35,249	70	16,496	36	15,229	13	3,524
1957 ...	141	40,100	97	21,534	27	15,984	17	2,582
Withdrawals and Adjustments	-2	-184	—	-46	-2	-138	—	—

Approved Woodlands

Under the Approved Woodlands Scheme, woodlands which are being managed in accordance with a plan of operations approved by the Commission qualify for a planting grant at half the rate fixed for Dedicated and Small Woods. This scheme suits many owners who for various reasons do not wish to enter into a dedication agreement.

At the end of the year, a total of 139,800 acres of woodland (England 97,600 acres on 352 estates, Scotland 38,200 on 66 estates, Wales 4,000 acres on 20 estates) on 438 estates had been accepted as Approved Woodlands. The additions during the year were less than in the two previous years, but nevertheless reached 24,800 acres of woodland on 82 estates. Again this scheme was apparently more to the liking of woodland owners in England, and of the total approved during the year, 73 estates covering 18,600 acres of woodland are in England as against 6 estates covering 5,700 acres in Scotland and 3 estates with a total of 500 acres of woodlands in Wales.

At the end of the year, 106 estates were known to be preparing plans of operations for 29,000 acres for acceptance under this scheme.

Planting on Private Estates

In addition to grants for planting in Dedicated and Approved Woods, grants are available for planting undertaken in woods coming within the category of Small Woods, and also for planting poplars in blocks or in lines

A summary of the planting done under all grant-aided planting schemes which were inspected and passed during the year is given in Table 22 below.

PLANTING UNDER GRANT-AIDED SCHEMES

Table 22 Areas inspected and passed for payment
Year ended 30th September Acres

	Planting under Dedication	Small Woods Planting	Approved Woods Planting	*Poplar Planting	Total
Number of Schemes	865	851	330	98	2,144
GREAT BRITAIN ...	19,625	4,373	4,507	284	28,789
England	7,719	2,392	2,482	264	12,857
Scotland	10,535	1,255	1,889	11	13,690
Wales	1,371	726	136	9	2,242

* In addition 3,738 trees (3,628 in England and 110 in Scotland) were planted in lines and qualified for grants on the "per tree" basis.

The above table shows that of the total area of 28,789 acres of planting inspected and passed during the year, 69 per cent. was in Dedicated Woods while planting in Small Woods and Approved Woods each accounted for 15 per cent. of the total. Not so much poplar was planted during the year, either in blocks or in lines.

The actual area of all plantings on private estates is not accurately known, but it is estimated that in the year under review it probably exceeded 31,600 acres; of this 28,600 acres are known to have been planted under grant schemes, and 3,000 acres are estimated to have been planted without a grant being applied for. This estimate is probably a conservative one. Details by countries are given in Table 23 opposite.

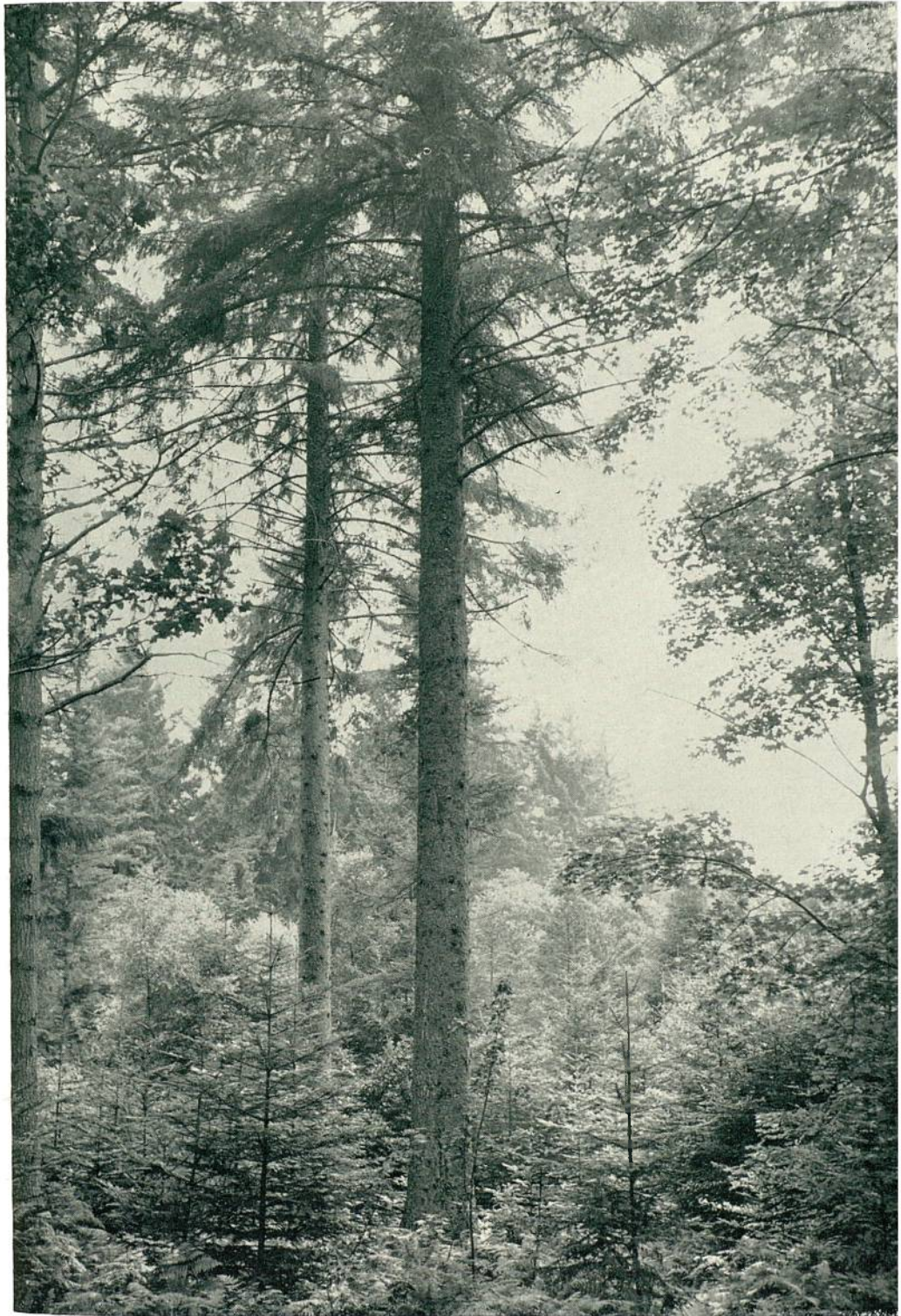


PLATE I. Sitka spruce in the New Forest, Hampshire.

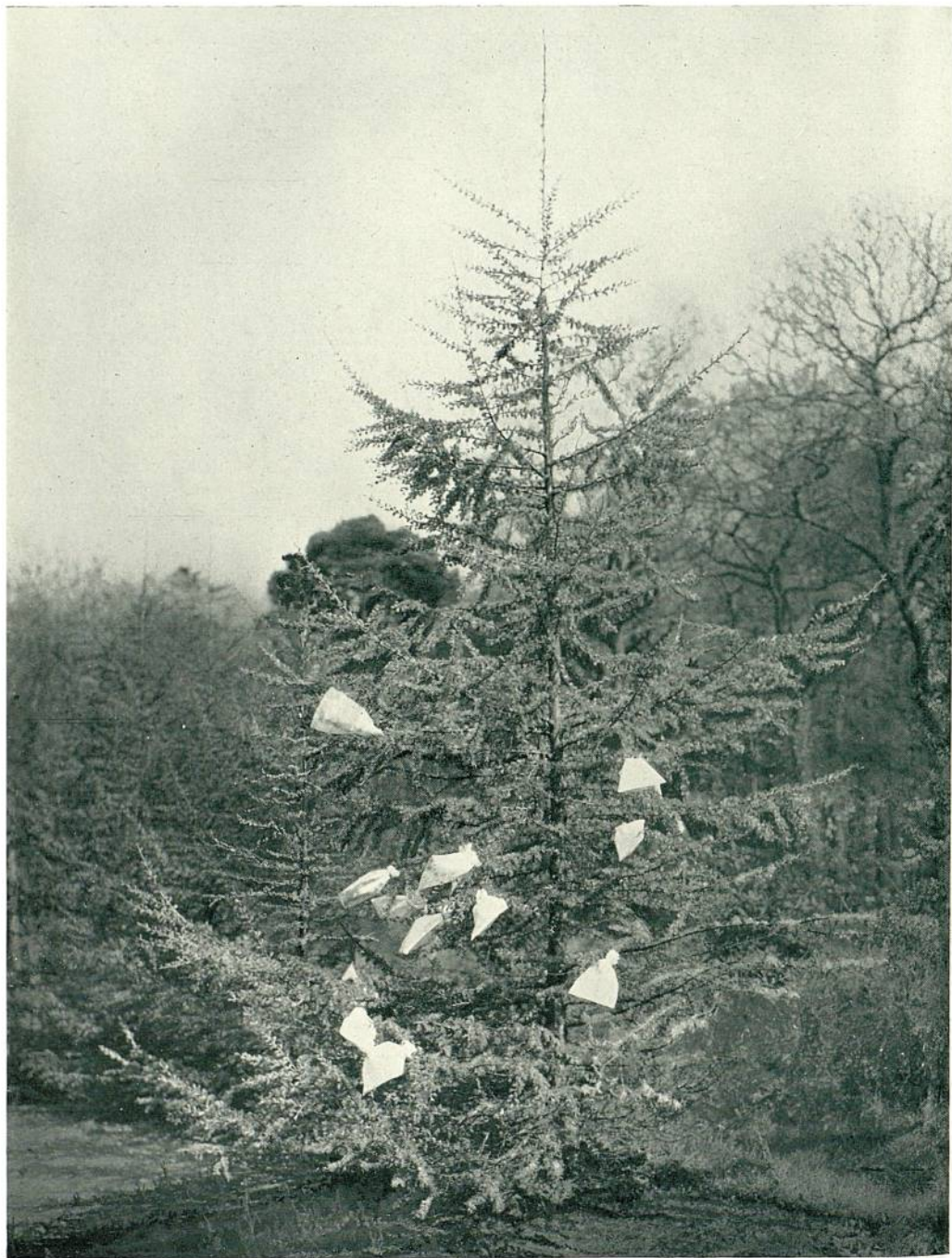


PLATE 2. A hybrid of Japanese and Dahurian larches in the Genetics Nursery at the Forest Research Station, Farnham, Surrey. Planted in 1953 when three years old it is now 17 feet tall. The white bags isolate a number of cones to be used for further crossing experiments.

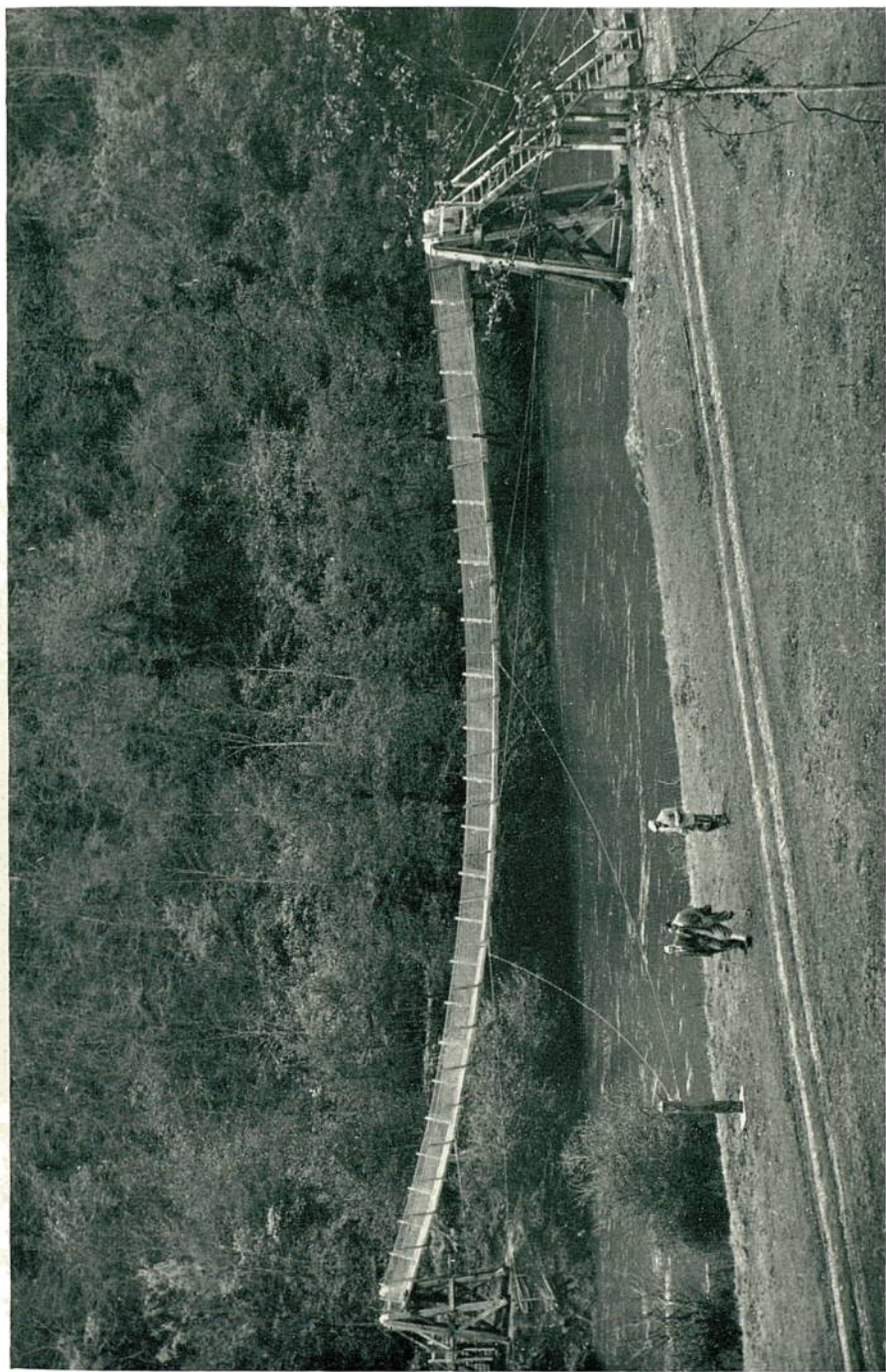


PLATE 3. A suspension bridge of 200 foot span constructed by the Commission's engineers across the River Wye in the High Meadow Woods, Forest of Dean, Gloucestershire.

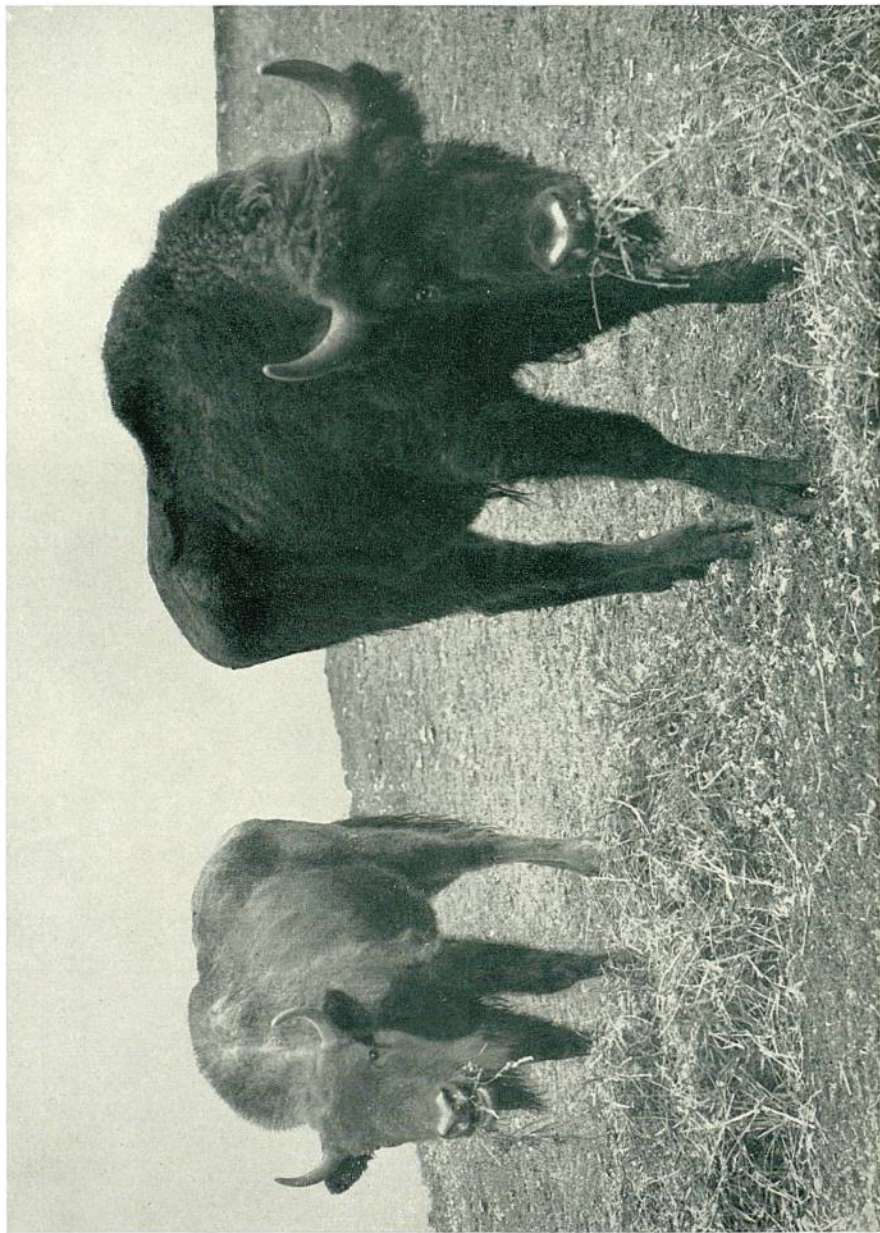


PLATE 4. Two young European bison; a gift from the Government of Poland to the Forestry Commissioners.

ESTIMATED AREA OF PRIVATE PLANTING

Table 23

Year ended 30th September

Acres

	Grant-aided	Planted without the aid of Grants	Total
GREAT BRITAIN	28,600	3,000	31,600
England	12,500	1,500	14,000
Scotland	14,000	1,200	15,200
Wales	2,100	300	2,400

The Commissioners are pleased to note that there has been a progressive increase over the years of the area planted annually by woodland owners, and in order to remove some of the limitations which shortages of plants may have imposed on private planting they have made, and are again making available considerable numbers of plants for lining out and for planting. The progress of private forestry is discussed earlier in this Report (page 10).

Scrub Clearance Grants

These grants were first made available in 1954, since when they have assisted owners to clear more than 10,000 acres of scrub, which but for the financial help given under this scheme might well have remained unplanted and unproductive. The rate of the grant is related to the difficulties of clearing the land for planting, and is applicable to Dedicated Woodlands, Approved Woodlands and also to woods coming within the category of Small Woods. This grant is payable in addition to the appropriate planting grant.

During the year 489 schemes covering the clearing of 4,477 acres of scrub were inspected and passed for the first payment. In the previous year 3,546 acres of scrub were cleared. Details by countries are given below.

SCRUB CLEARANCE GRANTS

Schemes inspected and passed for First Payment
Year ended 30th September

Table 24

	Number of Schemes	Area (acres)
GREAT BRITAIN	489	4,477
England	319	2,788
Scotland... ..	66	835
Wales	104	854

An analysis of the areas cleared shows that 3,261 acres were in Dedicated Woodlands, 634 acres in Approved Woodlands and 582 acres in the Small Woods category.

Thinning Grants

The work carried out during the year with the aid of this grant covered the thinning of 11,607 acres from which the outturn was just over 3 million cubic feet. There has been a slight drop, which calls for no comment, in both the acreage thinned and in the outturn, as compared with the previous year. This scheme was first introduced in 1949 as a stimulus to owners to thin their woods and plantations when timber prices were still subject to control. In 1951 the present regulations were introduced and restrict the grant to thinnings

in the younger plantations. Since the introduction of this grant, 111,000 acres of private plantations have qualified for this subsidy and have yielded 35.4 million cubic feet.

THINNING GRANTS

Table 25 Schemes Inspected and Passed for Payment
Year ended 30th September

	Number of Schemes	Area (acres)	Estimated Volume (cubic feet)
GREAT BRITAIN	860	11,607	3,056,112
England	545	6,574	1,617,761
Scotland	243	4,489	1,262,397
Wales	72	544	175,954

Loans to Woodland Owners

Greater interest is being shown in the facilities for obtaining loans for forestry purposes. During the year loans amounting to £47,000 were made; in the previous year they totalled £25,000. These loans are accounted for under Capital Expenditure in Appendix 2 on page 59.

Licensing of Timber Felling

During the year 6,788 licences were issued; these authorised the felling of 41.744 million hoppus feet of timber. The corresponding figures for the previous year were 7,188 licences covering the felling of 41.792 million hoppus feet.

A summary analysis of the licences issued in the year under report is given below:

	<i>Hoppus feet</i> <i>(millions)</i>
<i>Conifers</i>	
<i>Counting against Quota</i>	
Over 6 inches quarter-girth at breast height	6.992
<i>Not counting against Quota</i>	
Thinnings over 6 inches quarter-girth at breast height	3.125
6 inches quarter-girth and under at breast height	6.732
	—————
	16.849
<i>Broadleaved species</i>	
<i>Counting against Quota</i>	
Over 6 inches quarter-birth at breast height	23.652
<i>Not counting against Quota</i>	
6 inches and under at breast height ...	1.243
	—————
	24.895
	—————
	41.744
	—————

As noted earlier in this Report (page 11) the coniferous and broadleaved quotas for the year were 7·300 million and 26·000 million cubic feet respectively. From the above table it will be seen that the quotas were not quite fully taken up ; in the conifer quota there was a residue of 0·308 million cubic feet and in the broadleaved quota a residue of 2·348 million cubic feet. The quantities of wind-blown timber included in the above were: coniferous, 0·800 million cubic feet ; broadleaved, 0·092 million cubic feet.

The volume of timber, conifer and broadleaved, not coming within the quota restrictions for which licences were issued, amounted to 11·100 million cubic feet. This is close on two million feet less than last year, most of this being in respect of small conifers of six inches quarter-girth and under.

Of the 6,788 licences issued during the year, 2,319 authorised the clear felling of 23,040 acres. An analysis of these shows that 1,560 licences covering 15,107 acres were issued subject to replanting and maintenance conditions, that 411 licences covering 3,549 acres were in respect of fellings on dedicated estates and that 348 licences covering the clear-felling of 4,384 acres were issued to other estates with no replanting conditions imposed. As 2,446 acres of the area on which no replanting conditions were imposed will be acquired by the Commission and 228 acres were for the removal of an over-wood growing above an established crop, the restocking is thus assured of 21,330 acres out of the total area of 23,040 acres authorised during the year for clear felling.

In addition, 190 replacement licences were issued in respect of time-expired licences ; these cover the felling of 4,184 acres, of which 2,735 acres are subject to replanting and maintenance conditions ; of the remaining 1,449 acres, a total of 1,213 acres will be replanted, as 340 acres are in respect of dedicated woodlands and 873 acres are being acquired by the Commission.

The administrative cost of licensing during the year under report was £56,000 ; in the previous year it was £42,000. (Appendix 7, page 61).

RESEARCH AND EXPERIMENT

Research work and special investigations into forestry problems were continued at the Forest Research Station, Alice Holt Lodge, near Farnham, Surrey, and also in experimental areas in many forests in England, Scotland and Wales. Expenditure amounted to £300,000, as compared with £265,000 in the previous year (for details see Appendix 5, page 60).

A brief outline of some of the more important work undertaken is given in the following paragraphs. Fuller accounts of research projects will be found in the *Report on Forest Research for the year ended March, 1957*.*

During the year, the Research Station was visited by 403 persons ; these included students from home universities and other institutions, also forest officers and other visitors from the following countries:—Austria, Australia, Belgium, British Honduras, British East Africa, Canada, Cyprus, Denmark, Eire, Finland, Formosa, Germany, Ghana, India, Iran, Italy, Kenya, Netherlands, New Zealand, Norway, Nyasaland, Pakistan, Rhodesia, Russia, Sierra Leone, South Africa, Sudan, Sweden, Switzerland, Tanganyika, Thailand, Turkey, United States of America and Yugoslavia.

Silviculture

The Seed Testing Laboratory, in addition to its primary function of determining the purity and germinative quality of the seed used by the Commission, also started an extensive investigation into the storage requirements of

* H.M.S.O. 9s. 6d.

beech nuts ; good seed years of this species are infrequent and irregular, and it would thus be very useful to be able to store seed against years when little or none is produced. Other work in hand is the standardisation of oven drying methods of seed moisture determination ; trials of an infra-red moisture meter for making quick moisture checks of stored seed are also being made.

As regards nursery work, special attention is being paid to root pruning as an alternative to transplanting. Progress has been made in characterising the types of root and shoot formation associated with the two processes and in defining differences between good and bad plants which influence their survival and subsequent growth when planted in the forest. Application of the partial soil sterilisation and manuring practices found suitable for Sitka spruce is being extended to several species of silver firs (*Abies*) to reduce if possible the long period plants of this genus often spend in the nurseries. Tests of various chemicals for the treatment of seed to reduce attacks by birds have not been successful, but attacks by cutworms (larvae of Noctuid moths) can now be effectively controlled. The long term fertility trials comparing organic and inorganic manures continue, and are showing useful indications of the advantages of both forms of manuring.

Work has continued on the reduction of plant losses due to drying out during handling, storing and transit. Polythene film as a wrapping material has given excellent results, and large scale trials are in progress to study the economics of the method in general practice.

Work on the extension of the limits of afforestation by the establishment of trial plantations on acid peat and on exposed coastal or elevated sites was extended. Special investigations into atmospheric pollution in relation to tree growth are being conducted in the Pennines with the co-operation of water boards and other authorities.

The effects of manuring slowly growing " pole-stage " coniferous crops are being studied ; the experiments now being laid down are designed to give information on the response to fertilisers in terms of production, and also to provide material for the study of the nutrient content of trees in relation to growth. Several experimental plots to compare the growth of mixtures of two species with that of pure crops were planted, with the eventual object of comparing both the crops and the soils which result.

New experimental plots, comparing heavy crown thinnings with normal methods developed from low thinning, have been laid down. The assessment of many experimental plots planted at different spacings some twenty years ago is now being undertaken. Results of the pre-war series of pruning experiments are also now becoming available ; some of the experiments have been terminated by windblow, and the timber will be examined, while others will continue to a greater age.

A survey of the experiments on the natural regeneration of some of the remnants of the native Caledonian pine was undertaken. These experiments have been in existence for a number of years and show that many of these relics of the original forest are unable to regenerate themselves naturally.

The National Populetum at Alice Holt, commenced in 1953, now contains 196 clones. When completed, this collection of the important species, varieties and hybrids will total some 350 clones.

Forest Genetics

The selection of seed sources for current planting programmes was continued. The present Register of Seed Sources contains 319 classified entries covering 5,506 acres. Information from this Register was made available to the Scottish Forest Tree Seed Association who have compiled a Register of Seed Sources for their members.

The selection of outstanding parent trees for breeding work was also continued and 2,072 trees are now registered. More than four hundred of these trees were propagated by grafting during the Spring of 1957; the total number of grafts attempted was 7,834, of which seventy eight per cent. were successful. The "mist" method was used with success in the propagation of cuttings of the hybrid cypress *Cupressocyparis leylandii*.

The establishment of collections (Tree Banks) of grafts and rooted cuttings representing selected parent trees of Scots pine, the larches, Douglas fir, beech and certain other species was begun at three sites; a total of five hundred and eighty-five clones were planted. The planting of seed orchards of Scots pine, the larches, Douglas fir and beech was continued at sixteen sites.

The seed derived from controlled pollination of larch, Douglas fir and beech was sown in Spring, 1957, and of these the larch plants have developed especially well.

Forest Pathology

Work on *Fomes annosus*, a fungus causing butt rot and death of conifers, was continued. Large areas have now been surveyed for the occurrence and intensity of this disease and it is thought that enough data on its development have been accumulated for preliminary decisions on stump protection to be made. A wide experimental programme covering most of the practical problems of control has been laid down.

Further outbreaks of "group dying" of conifers were observed, mostly in the west of Scotland. Observations were also made on needle cast of Scots pine caused by the fungus *Sclerophoma pithyophila* which has been serious in some areas lately.

Experimental spraying in the nursery has shown that a formulation of copper oxychloride gives some control of *Keithia thujina* on *Thuja plicata*. Similarly, work on *Botrytis cinerea* has shown that control in the nursery may be achieved by a precautionary spray before infection occurs; several materials gave control, but a Thiram formulation gave best results. Both these spraying projects are in the preliminary stages and will require further work.

Forest Management

The work of this Section comes under four main headings:—Working plans, forest economics, census of woodlands and studies of growth and yield. Working plan activities have been concerned mainly with procedure and with the improvement of field techniques. The field work for a number of working plans has been carried out in order to test the methods evolved. The Forest Economist has devoted his time to a broad survey of problems and of related statistics. A start has also been made on a number of specific studies.

The revision of the 1947–49 census of woodlands has continued; the resurvey of the counties of Essex, Cumberland and Westmorland was completed, with the resurvey of Devon still in progress at the end of the year. Thirty-four new sample plots were established, mainly in England, nine plots in Scotland were abandoned because of windblow, and one hundred and thirty-five plots were remeasured. Provisional yield tables for oak, beech, and western hemlock have been prepared for publication.

Statistics

A separate Statistics Section, concerned with the design and analysis of experiments and interpretation of results, has been formed. In addition to

the work carried out for other sections of the Research Branch, investigations have been designed and results analysed for the Utilisation Development, the Work Study and the Establishment Sections of the Commission. A start has been made in using electronic digital computers to analyse some of the more complex problems of forest research and management.

Forest Entomology

The annual survey of the density of the pupae of the Pine Looper moth (*Bupalus piniarius*) was carried out during the winter months. Few pine-woods throughout the country showed an average of more than one pupa per square yard except at Tentsmuir Forest, Fife, where counts of pupae of up to 70 pupae per square yard were recorded and about ten compartments were at the time considered to be in danger. After the adult moths had emerged, intensive egg counts showed that 15 compartments (about 350 acres) needed treatment, the highest count recorded being over 7,000 eggs per tree. A special D.D.T. formulation was applied from the ground as a fog at the rate of 1 lb. of D.D.T. per acre during September. A high degree of control was obtained, as shown by larval drop counts, and again by subsequent tests carried out in selected areas where the crop received a second and heavier application. The study of the factors affecting the increase and decrease of the numbers of this insect was continued.

Utilisation Research

The Advisory Committee on the Utilisation of Home Grown Timber met twice during the year. On the Committee's recommendation plans were made to lay down a long-term experiment on the effects of soil and climate on the life of treated and untreated timbers in contact with the ground. The sites are being provided on farms belonging to the Colleges of Agriculture and the Hill Farming Research Organisation in Scotland, and also by the Ministry of Agriculture in England and Wales. By the end of the year the laying out of the Scottish section of the experiment had been completed.

Following a recommendation by the Committee, the Director of the Forest Products Research Laboratory, Department of Scientific and Industrial Research, convened a committee, representing producers and consumers, to draw up grading rules for sawn British hardwoods. At the close of the year the draft rules were being examined by the constituent bodies.

The results of an inquiry into the availability of machines for briquetting wood-waste were published in the trade press during the year. Work was continued on uses for bark, with special reference to the possible use of conifer bark as a source of tannin. The Committee also had under consideration questions relating to the use of thinnings and waste for the manufacture of fibre building boards and paper pulp.

Machinery Research

The absorption of manpower in forest nurseries continues to pin-point nursery operations as one of the main subjects for mechanisation. There are now alternative machines for some operations such as lining-out, where the Ledmore Plough and the six-unit Holland Machine are competitors; both are in use at present at Roudham, near Thetford, which is being used for trial as a fully mechanised nursery.

The special tractor developments undertaken during the last few years to meet very soft ground conditions seem to have met current requirements. Deep drainage ploughs are still needed in certain areas and a plough is now available giving a depth of thirty inches. Drain cleaning in plantations where a tractor is unable to enter is a problem still not satisfactorily solved;

work on this project continues. A small powered machine which can replace the horse is still needed, and to this end preliminary work is proceeding on a small timber arch with a three horse-power engine carrying a half-ton load and operated by a man on foot.

A number of commercial machines are now available covering such operations as bark peeling, scrub clearance, power sawing, winching, transport, etc. These machines are tested whenever it appears that they may meet a forestry requirement. Manufacturers are showing an increasing willingness to submit their machines to these field trials.

Grants to Universities and other Institutions

Grants for research work on forest soils were made to the Imperial Forestry Institute, Oxford, the Macaulay Institute, Aberdeen and to the Rothamsted Experimental Station. Soil mycology investigations were continued by Dr. I. Levisohn of Bedford College, London ; a grant was made to the University College of North Wales also, for studies in this subject. A grant to the Botany School, University of Cambridge, covered investigations into the causes of *Fomes annosus* fungal outbreaks and the ecology of fungi colonising coniferous tree stumps.

Other grants included those made for shelterbelt research work being undertaken by the University of Edinburgh, for morphological variations in coniferous species by the University of Aberdeen, for studies on the physiology of flowering of forest trees by the University of Manchester and for research on the fungus *Keithia thujina* by the University of Nottingham.

Advisory Committee on Forest Research

The meeting of the above committee to discuss current research work and future programmes was held at Aldeburgh, Suffolk, in July 1957, and visits were made to several experimental areas in Rendlesham and Tunstall Forests.

EDUCATION

Expenditure on Forester Training Schools, Short Courses for Forest Workers, the Forestry Apprenticeship Scheme, Northerwood House and other courses was £157,000. Income amounted to £39,000 of which £21,000 represents the value of work done in Commission forests by students at the Forester Training Schools. For details of expenditure and income please refer to Appendix 6 on page 60.

Forester Training Schools

To meet the post-war needs of trained subordinate staff both within the Commission and in private forestry, the Commissioners in 1947 increased the number of Forester Training Schools from two, the pre-war number, to five. A recent review of the Commission's future requirements of subordinate staff led to the decision to close one of the five Schools, and in July, 1957, the Forester Training School at Lynford Hall, near Thetford, Norfolk, closed down. From the start of the new sessions in August, there are thus now four Schools ; one in England, in the Forest of Dean, Gloucestershire ; two in Scotland, one being at Benmore, Argyll, and the other at Faskally, near Pitlochry, Perthshire ; and one in Wales near Betws y Coed, in Gwydyr Forest, Caernarvonshire.

The course of training extends over two years, and at the beginning of the year 218 men were under instruction, 96 in their first year and 122 in their second year. The two-year course was completed by 119 men, 114

of whom were awarded a Forester's Certificate. Of these men, 85 took up employment with the Forestry Commission, 4 went to private estates, 2 obtained posts in Nyasaland and one in Tanganyika, while 4 from Kenya and 2 from Northern Rhodesia sent to the Schools for training returned to their respective Services, while 9 nominated by the Government of Northern Ireland returned to that country ; 7 entered other employment.

Short Courses for Forest Workers

Three courses, each lasting six weeks, were held, two at Chatsworth Estate, Derbyshire, by the courtesy of His Grace the Duke of Devonshire, and one on the Atholl Estates, Dunkeld, Perthshire, by the courtesy of Mrs. Campbell-Preston. The object of these courses is to provide selected forest workers with training in the theory and practice of forestry to fit them for supervisory duties on private estates. A total of 44 men attended these courses and were awarded certificates of efficiency by the Forestry Commission. In addition, those who went to Chatsworth took the examination for the Woodman's Certificate of the Royal Forestry Society of England and Wales and all passed ; at Dunkeld, all members of the course took the examination for the Junior Forester's Certificate of the Royal Scottish Forestry Society, and all were successful.

Forestry Apprenticeship Scheme

During the year 36 apprentices successfully completed their apprenticeship and were awarded certificates which qualify them for guaranteed employment as skilled forest workers. There are now 95 apprentices in training at a number of forests in England, Scotland and Wales. Local education authorities co-operate by admitting apprentices to classes for further education on one day a week.

Northerwood House

The use of Northerwood House in the New Forest continues as a centre where special courses on forestry are given, and for accommodating University students studying working plans and silviculture in the Forest.

Nineteen weeks were occupied by courses and study groups arranged for the Commission's staff: the subjects covered included fire protection, utilisation, silviculture, nursery management, forest management, research, private woodlands, and introductions to the Commission's work for new entrants. Courses on forestry and forestry practice were arranged for landowners and agents, officers of local authorities, planning officers of county authorities, schoolteachers, nurserymen, members of Young Farmers clubs, and schoolteachers in training. Other meetings held at Northerwood House were: a conference of Conservancy staffs ; a working party on forest maps ; and a joint study group of officers of the Commission and of the Ministry of Agriculture, Fisheries and Food which met to consider forestry and land use.

Students from the Universities of Aberdeen, Cambridge, Edinburgh, Oxford, and the University College of North Wales were in residence for periods totalling 12 weeks.

Courses in Scotland

Two courses for Scottish landowners and factors were arranged at Faskally, Perthshire ; and at Benmore, Argyll, two courses for Scottish schoolteachers were given. These courses were each of one week's duration.

PUBLICATIONS

Eleven new publications for sale were issued through H.M. Stationery Office,* and twelve sale publications were revised and re-issued; revisions were also made of five free pamphlets† which are circulated directly by the Commission. In addition to this normal programme, 23 papers were printed for presentation to the Seventh British Commonwealth Forestry Conference, held in Australia and New Zealand during the summer of 1957.

Normal Programme

The new sale publications included four reports under the following titles:

- (1) Annual Report of the Forestry Commissioners, 1955 (H.C. 341, 1956).
- (2) Annual Report of the Forestry Commissioners, 1956 (H.C. 188, 1957).
- (3) Report on Forest Research, 1956.
- (4) Report of the Committee on Marketing of Woodland Produce, 1956.

The Bulletin series was extended by four major works, as follows:

- (5) Bulletin No. 27. Utilisation of Hazel Coppice. A comprehensive study of all aspects of using hazel, compiled with the assistance of the Rural Industries Bureau and of concerns interested in the possible application of hazel to paper and board manufacture.
- (6) Bulletin No. 28. Sitka Spruce in British Columbia. A study in the forest relationships of this tree, so important in our planting schemes, carried out by Mr. W. R. Day of the Imperial Forestry Institute, Oxford.
- (7) Bulletin No. 29. Shelterbelts and Micro-climate. A fundamental study of the effect of shelterbelts on wind flow, with particular reference to the protection of agricultural land, by Dr. J. M. Caborn of the Forestry Department, Edinburgh University.
- (8) Bulletin No. 30. Exotic Forest Trees in Great Britain. An extensive report, under the general editorship of Mr. James Macdonald, Director of Research and Education, bringing together information on all aspects of growing introduced timber trees in Britain. Prepared for presentation to the Seventh Commonwealth Forestry Conference.

The Leaflet and Forest Record Series were extended by the following items:

- (9) Leaflet 39. The Quality of Poplar Plants.
- (10) Leaflet 40. The Pine Shoot Moth and Related Species.
- (11) Forest Record 32. New Ways of Using the General Tariff Tables for Conifers.

The twelve priced items revised during the year included: the guide books to the New Forest, the Dean Forest and the Glen More National Forest Park; four Leaflets; one Forest Record; a booklet on woodland mosses; and three booklets in the "Britain's Forests" series.

* Published by H.M.S.O. at the following prices: (1) 4s. 6d.; (2) 4s. 6d.; (3) 6s. 0d.; (4) 4s. 6d.; (5) 10s. 0d.; (6) 20s. 0d.; (7) 17s. 6d.; (8) 17s. 6d.; (9) 6d.; (10) 9d.; (11) 1s. 3d.

† Copies obtainable on request from the Secretary, Forestry Commission, 25, Savile Row, London, W.1. A full publication list (Sectional List No. 31) is available free of charge from either the Secretary or H.M.S.O.

The revision of the unpriced pamphlets was occasioned by the need to give up-to-date information following changes in rates and regulations, etc. Those affected were:

- Grants for Woodland Owners.
- Training as a Forester.
- Traps for Grey Squirrels.
- Camping in the National Forest Parks.
- The Forestry Commission in Scotland.

Commonwealth Conference Programme

For the Seventh British Commonwealth Forestry Conference, held in Australia and New Zealand in August, 1957, the Commission prepared a formal statement entitled:

- (1) Statement by the Forestry Commission of Great Britain, prepared for the British Commonwealth Forestry Conference, 1957.*

In addition to Bulletin 30, referred to above, the following original papers* by members of the Commission staff were published for presentation at the Conference:

- (2) Developments in Pulping & Board Manufacture in Great Britain. (A. Watt.)
- (3) Experiments on the Control of the Pine Weevil, *Hylobius abietis* L. (M. Crooke.)
- (4) Improvement of Scots Pine in Britain by Selection and Breeding. (J. D. Matthews.)
- (5) Is Present Day Forest Products Research Meeting the Needs of the Forester? (O. J. Sangar.)
- (6) Planned Land Use and the Classification and Dedication of Land for Forestry. (Sir Henry Beresford-Peirse.)
- (7) Planning a Forestry Research Programme. (M. V. Laurie.)
- (8) Recent Observations on the Rusts of Pine in Britain. (T. R. Peace.)
- (9) Top Dying of Norway Spruce in Great Britain. (J. S. Murray.)

In addition, the following original papers by members of other bodies concerned with forestry in Britain were printed for Conference use:

- (10) Australian Quarantine and Wood-boring Insects. (R. C. Fisher, Dept. of Scientific and Industrial Research, Forest Products Research Laboratory.)
- (11) Desirable Balance Between Hardwood and Softwood Production in Great Britain. (H. M. Steven & W. M. McNeill, University of Aberdeen.)
- (12) Diagnosis of Mineral Deficiencies in Forest Crops. (L. Leyton, Imperial Forestry Institute.)
- (13) Effect of Rate of Growth (Ring-width) on the Quality of Softwoods. (B. J. Rendle & E. W. J. Phillips, Dept. of Scientific & Industrial Research, Forest Products Research Laboratory.)
- (14) European and Near East Experience of Planned Land Use. (J. J. MacGregor, Imperial Forestry Institute.)
- (15) Grading of Hardwoods in the Commonwealth. (A. H. Lloyd, Imperial Forestry Institute.)

* Copies obtainable from the Secretary, Forestry Commission, 25, Savile Row, London, W.1.

- (16) The Imperial Forestry Institute between 1947 and 1956. (Sir Harry Champion, Imperial Forestry Institute.)
- (17) Is Present Day Forest Products Research Meeting the Needs of the Timber Trade? (Bryan Latham.)
- (18) Planning of a Management Unit. (F. C. Osmaston, Imperial Forestry Institute.)
- (19) Potentialities of Savanna Woodland. (E. W. Jones, Imperial Forestry Institute.)
- (20) The Problem of Unmerchanted Species in the Management of Tropical Forests. (W. A. Gordon, Imperial Forestry Institute.)
- (21) Production of Hardboard from Tropical Hardwoods. (D. F. Packham, Forest Products Research Laboratory, Dept. of Scientific and Industrial Research.)
- (22) Thoughts on Higher Forestry Education. (Sir Harry Champion, Imperial Forestry Institute.)
- (23) Work of the Commonwealth Forestry Bureau, Oxford, 1952-1957. A Progress Report. (F. C. Ford Robertson, Commonwealth Forestry Bureau).

PUBLICITY AND PUBLIC RELATIONS

Special efforts were made to draw attention to the Commissioners' proposals for greater co-operation with the hill farming community and to the need of more land for planting, and in this connection a press conference was presided over by the then Minister of Agriculture, Fisheries and Food, the Rt. Hon. D. Heathcoat Amory, M.P. The Commissioners appreciate the attention these matters received in newspapers and in the farming press by way of special articles.

Other aspects of the Commission's operations and of forestry in general also received much publicity in the press; this was especially valuable in connection with various educational courses arranged by the Commissioners, and with making known the camping facilities provided in the National Forest Parks and also impressing on the public the risk of accidental fires in woodlands. Press representatives were taken on tours in a number of forests so that local fire problems might be publicised and stressed. The B.B.C. have also assisted in fire danger publicity by issuing warnings at periods of high fire risk and an independent television company included forest fire scenes on film between programmes. In addition a number of features on forestry were broadcast on the B.B.C.'s sound radio service.

The major agricultural shows were again supported by displays arranged locally by Conservancies and also by an exhibit which travelled from show to show. In several cases where agricultural societies have acquired permanent show grounds, the Commissioners have undertaken to treat existing woodland on or near the sites, so that practical demonstration areas may be available.

The Commissioners maintained their efforts to interest young people in forestry and supported several exhibitions concerned with careers. Schools in various parts of the country continued to develop plots within the Commissioners' woodlands and many organised visits to forests were arranged for students from training colleges for teachers.

Display material was loaned on numerous occasions to schools wishing to give classroom instruction in forestry, and more than 200 lectures were given by forest officers to schools and youth organisations and other public bodies.

NATIONAL FOREST PARKS

There is evidence of a growing public demand for the recreational facilities provided by the Commission at its eight National Forest Parks which have a combined extent of 428,000 acres of forest, mountain, and moorland. Two new camping grounds were opened during the year, and during the summer months accommodation at the seven older camping centres was fully used, and indeed occasionally overtaxed.

The Forest of Dean Park, on the borders of Gloucestershire, Herefordshire, and Monmouth, showed an increase of campers at the main site from 5,500 to 6,500. A second camping ground, for members of the Boy Scouts organisation, situated at Soudley in Gloucestershire, also proved very popular. Viewpoints were cleared and seats set up at several places in the Tintern woods, to add to their amenities.

In the New Forest, which although not a National Park is a very popular region for camping, riding, and walking, the number of overnight stays for which permits were issued rose remarkably from 83,000 in 1956 to 124,000 in 1957. At the Beddgelert camping ground in the Snowdonia National Forest Park campers increased from 17,000 to 20,000 and as many as 700 people were using this site at one time.

At the Border National Park, which includes adjacent forests in Northumberland, Cumberland and Roxburghshire, an exceptionally promising camp site has been partially developed. It comprises a stretch of level ground in a bend of the North Tyne at Lewisburn, in the heart of Kielder Forest, with sprucewoods extending in all directions around it. An approach road has been provided and sanitary facilities have been put up. The first visitors were admitted in June, and although this was late in the year for camping and the site was still little known, nearly 4,000 stays were recorded. Another development at the Border Park has been the marking of selected walking routes with coloured discs, as a guide to walkers.

In the Queen Elizabeth Forest Park, which extends from Loch Lomond over Ben Lomond to the Trossachs, a camping ground was opened in June on the eastern shore of Loch Lomond, where there are facilities for bathing and boating, as well as for hill climbs. During its first short season, 6,000 overnight stays were recorded. At the Argyll National Forest Park, also in West Scotland, over 52,000 such visits were registered, as compared with only 31,000 in the previous year.

At the Glentroot National Forest Park in Galloway, nearly 10,000 stays were made, despite the remote location of the camp site; this compares with 6,000 in 1956. At Glenmore in the Cairngorms, the number of visitors, approximately 31,000, was the same as in the previous year; this figure includes a large number of schoolchildren and young people who take advantage of the courses in outdoor activities arranged by the Scottish Council for Physical Recreation at Glenmore Lodge.

In addition to the numbers quoted, the Forest Parks are enjoyed by many thousands of people who stay at hotels and Youth Hostels in their vicinity, and by day visitors whose numbers are impossible to assess. New editions of guides to the New Forest, the Dean Forest, and Glenmore were published during the year, and a guide to the Border Forest Park

is in preparation. A free pamphlet *Camping in the National Forest Parks*, which gives the situations and facilities at the various camping grounds, is available on request from Commission offices.

RADNOR, *Chairman*.
R. C. G. COTTERELL.
LLOYD O. OWEN.
JOHN STIRLING.
W. H. VAUGHAN.
A. P. F. HAMILTON.
D. C. BOWSER.
ROBERT TAYLOR.
BRYAN LATHAM.

H. A. TURNER, *Secretary*,
25, Savile Row,
London, W.1.

APPENDICES

Year Ended 30th September, 1957

Appendix 1

FINANCIAL STATEMENT

1956 £000's	TO BE ACCOUNTED FOR	1957 £000's
8,351	Forestry Fund	9,360
	Other Expenditure:	
823	Provision for Depreciation and Pensions and Gratuities	886
7	Net Variation in work-in-progress, stocks, debtors, sundry balances and cash	Cr. 23
<u>830</u>		<u>863</u>
<u>9,181</u>		<u>10,223</u>
SUMMARY OF EXPENDITURE		
2,166	Capital Expenditure (Appendix 2) ...	2,571
5,421	Forestry Operations (Appendix 3) ...	5,893
743	Private Forestry (Appendix 4) ...	821
265	Research (Appendix 5) ...	300
112	Education (Appendix 6) ...	118
472	General Administration (Appendix 7) ...	520
2	Special Expenditure	—
<u>9,181</u>		<u>10,223</u>

Appendix 2

CAPITAL EXPENDITURE

1956 £000's		1957 £000's
261	Land	233
87	Standing Timber	136
420	Buildings	406
1,099	Roads and bridges	1,407
274	Vehicles, Machines and Equipment	340
25	Loans to Private Woodland Owners	47
—	Miscellaneous	2
<u>2,166</u>		<u>2,571</u>

Appendix 3

FORESTRY OPERATIONS EXPENDITURE

1956 £000's		1957 £000's
1,866	Preparatory work and formation of plantations	1,955
1,165	Maintenance of plantations	1,409
471	Forest Protection	474
1,205	Preparation of produce	1,182
3,066	Overhead Expenses	3,388
<u>7,773</u>		<u>8,408</u>
	Deduct:	
2,327	Sales of Timber and other Forest Produce	2,442
	Increase in stocks of Felled Timber and other Forest Produce	35
17	Sundry Receipts	38
<u>8</u>		<u>2,515</u>
<u>2,352</u>		<u>2,515</u>
<u>5,421</u>		<u>5,893</u>

Appendix 4

PRIVATE FORESTRY: EXPENDITURE

1956 £000's		1957 £000's
383	Grants under Dedication Schemes ...	441
48	Small Woods Planting Grants ...	61
25	Approved Woodlands Planting Grants	31
2	Poplar Planting Grants ...	2
—	Other Planting Grants ...	—
<hr/>		<hr/>
458		535
47	Thinning Grants ...	47
39	Scrub Clearance Grants ...	47
4	Grants to Co-operative Forestry Societies	2
15	Grey Squirrel Bonus ...	27
2	Miscellaneous ...	3
<hr/>		<hr/>
565		661
178	Administration, including Advisory Services ...	160
<hr/>		<hr/>
743		821
<hr/>		<hr/>

Appendix 5

RESEARCH EXPENDITURE

1956 £000's		1957 £000's
141	Silviculture, including Nursery work ...	165
20	Genetics ...	19
33	Mensuration, Census, etc. ...	42
28	Pathology and Entomology ...	29
5	Machinery ...	5
9	Utilisation ...	8
16	Grants to Institutions ...	15
13	Miscellaneous ...	17
<hr/>		<hr/>
265		300
<hr/>		<hr/>

Appendix 6

EDUCATION EXPENDITURE

1956 £000's		1957 £000's
130	Forester Training Schools ...	132
6	Short Courses ...	7
4	Forestry Apprenticeship Scheme	5
9	Northerwood House ...	10
3	Miscellaneous ...	3
<hr/>		<hr/>
152		157
	Deduct:	
25	Value of Student Labour ...	21
15	Other ...	18
<hr/>		<hr/>
40		39
<hr/>		<hr/>
112		118
<hr/>		<hr/>

GENERAL ADMINISTRATION

Appendix 7

1956
£000's

220	Directorate Offices	...	...	...	...
200	Headquarters	...	...	...	...
42	Administration of Felling Licensing	...	...	...	...
10	Information and Shows	...	...	...	...
<hr/>					
472					
<hr/>					

1957
£000's

238
215
56
11

520

PLANTATIONS MADE DURING THE YEAR ENDED

Appendix 8

Country or Conservancy	Total Area Planted (Acres)	Details of Area Planted (Acres)					
		Coniferous, Total	Broad-leaved, Total	Afforested		Replanted	
				Conifers	Broad-leaved	Conifers	Broad-leaved
GREAT BRITAIN ...	57,881	52,845	5,036	32,845	772	20,000	4,264
ENGLAND: ...	19,332	15,216	4,116	8,061	590	7,155	3,526
Conservancy:							
North West ...	3,788	3,107	681	1,707	86	1,400	595
North East ...	7,079	6,468	611	5,454	155	1,014	456
East ...	2,945	1,887	1,058	246	127	1,641	931
South East ...	2,503	1,671	832	98	75	1,573	757
South West ...	2,247	1,583	664	414	120	1,169	544
New Forest ...	513	369	144	141	24	228	120
Dean Forest...	257	131	126	1	3	130	123
SCOTLAND: ...	26,696	26,319	377	17,483	105	8,836	272
Conservancy:							
North ...	7,157	7,135	22	3,630	7	3,505	15
East ...	6,306	6,111	195	3,218	52	2,893	143
South ...	8,961	8,890	71	7,452	20	1,438	51
West ...	4,272	4,183	89	3,183	26	1,000	63
WALES: ...	11,853	11,310	543	7,301	77	4,009	466
Conservancy:							
North ...	6,503	6,334	169	4,283	20	2,051	149
South ...	5,350	4,976	374	3,018	57	1,958	317

30TH SEPTEMBER, 1957—SUMMARY BY CONSERVANCIES

Total plants used	Species Planted, including Beating Up (Thousands of plants)										
	Scots Pine	Corsican Pine	European Larch	Japanese Larch	Douglas Fir	Norway Spruce	Sitka Spruce	Oak	Beech	Other Species	
										Conifers	Broad-leaved
112,041	20,522	5,262	2,673	13,946	5,053	9,061	23,322	3,658	4,786	22,589	1,169
34,583	4,827	3,512	833	2,482	1,994	3,384	4,934	3,051	3,615	5,159	792
6,698	1,569	652	73	558	164	211	1,564	647	250	803	207
11,639	1,928	212	154	1,344	250	452	3,170	239	543	3,015	332
6,443	705	1,067	403	20	424	1,374	—	1,251	726	375	98
3,836	151	529	76	248	823	656	—	317	810	154	72
4,425	319	770	64	262	232	608	200	334	925	650	61
978	92	279	—	12	89	18	—	113	239	130	6
564	63	3	63	38	12	65	—	150	122	32	16
55,044	15,069	729	1,744	7,071	1,321	3,578	11,258	333	315	13,320	306
16,754	8,258	131	752	1,277	433	498	1,760	6	24	3,583	32
15,056	5,167	207	534	1,780	327	1,047	1,430	191	112	4,104	157
14,800	672	283	210	3,199	429	1,102	5,048	66	64	3,673	54
8,434	972	108	248	815	132	931	3,020	70	115	1,960	63
22,414	626	1,021	96	4,393	1,738	2,099	7,130	274	856	4,110	71
11,161	226	613	85	1,036	762	1,085	4,182	128	317	2,689	38
11,253	400	408	11	3,357	976	1,014	2,948	146	539	1,421	33

Appendix 9

SUMMARY OF SPECIES USED FOR PLANTING AND BEATING UP

Thousands of plants

Year ended 30th September 1957

SPECIES	GREAT BRITAIN			ENGLAND			SCOTLAND			WALES		
	Total	Planting	Beating up	Total	Planting	Beating up	Total	Planting	Beating up	Total	Planting	Beating up
	All Species	112,041	88,091	23,950	34,583	27,745	6,838	55,044	43,273	11,771	22,414	17,073	5,341
Scots pine ...	20,522	14,625	5,897	4,827	3,143	1,684	15,069	11,241	3,828	626	241	385
Corsican pine	5,262	3,713	1,549	3,512	2,761	751	1,729	425	304	1,021	527	494
European larch	2,673	2,010	663	833	697	136	1,744	1,247	497	96	66	30
Japanese larch	13,946	10,475	3,471	2,482	1,899	583	7,071	5,257	1,814	4,393	3,319	1,074
Douglas fir	5,053	4,038	1,015	1,994	1,571	423	1,321	1,055	266	1,738	1,412	326
Norway spruce	9,061	7,554	1,507	3,384	2,926	458	3,578	2,923	655	2,099	1,705	394
Sitka spruce	23,322	20,161	3,161	4,934	4,550	384	11,258	9,755	1,503	7,130	5,856	1,274
Tsuga heterophylla	1,744	1,309	435	619	405	214	457	380	77	668	524	144
Thuja plicata	734	537	197	338	266	72	203	146	57	193	125	68
Lodgepole pine	17,626	14,020	3,606	3,509	2,925	584	11,842	9,366	2,476	2,275	1,729	546
Hybrid larch	388	334	54	1	1	—	382	332	50	5	1	4
Lawson cypress	503	296	207	349	210	139	68	43	25	86	43	43
Picea omorika	41	23	18	12	—	12	9	5	4	20	18	2
Abies grandis	186	139	47	124	99	25	28	23	5	34	17	17
Spanish chestnut	51	33	18	36	21	15	1	1	—	14	11	3
Birch	287	183	104	192	95	97	95	88	7	—	—	—
Beech	4,786	3,842	944	3,615	2,983	632	315	240	75	856	619	237
Oak	3,658	3,134	524	3,051	2,637	414	333	297	36	274	200	74
Sycamore	535	409	126	384	281	103	142	120	22	9	8	1
Other Conifers	1,367	1,040	327	207	148	59	331	279	52	829	613	216
Other Broadleaved	296	216	80	180	127	53	68	50	18	48	39	9

SUMMARY AREA STATEMENT OF LAND USE: BY CONSERVANCIES

Appendix 10

At 30th September, 1957

Acres

Country or Conservancy	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
GREAT BRITAIN	2,253,800	33,617	24,264	1,121,003	322,475	810,322
ENGLAND:	694,064	8,651	10,681	437,827	99,970	156,267
North West Conservancy	112,762	1,793	1,995	71,619	16,260	24,883
North East Conservancy	227,310	5,609	1,470	129,483	33,107	64,720
East Conservancy ...	111,541	373	2,572	85,566	13,200	12,775
South East Conservancy	60,128	173	2,330	41,922	15,812	2,394
South West Conservancy	78,100	534	1,713	54,854	17,992	5,254
New Forest	77,161	165	348	32,689	2,045	42,427
Dean Forest	27,062	4	253	21,694	1,554	3,814
SCOTLAND:	1,230,152	17,588	9,108	481,864	160,928	587,360
North Conservancy ...	467,975	3,637	3,520	122,538	50,283	295,154
East Conservancy ...	230,510	3,270	3,036	135,107	36,519	58,884
South Conservancy ...	255,097	7,472	1,489	111,680	52,808	90,609
West Conservancy ...	276,570	3,209	1,063	112,539	21,318	142,713
WALES:	329,584	7,378	4,475	201,312	61,577	66,695
North Conservancy ...	178,715	4,303	2,200	107,501	25,267	45,947
South Conservancy ...	150,869	3,075	2,275	93,811	36,310	20,748

Note.—In Appendices 11–13 former Crown Woods are indicated by asterisks.

AREA STATEMENT OF LAND USE: BY FORESTS—ENGLAND

Appendix 11

At 30th September, 1957

Acres

Forest	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NORTH WEST CONSERVANCY: TOTAL	112,762	1,793	1,995	71,619	16,260	24,883
Arden, Warwick	1,005	—	53	281	724	—
Bagot, Staffs	1,342	—	104	686	655	1
Bawtry, Notts	586	—	29	514	21	51
Blengdale, Cumberland ...	1,138	135	—	1,074	—	64
Bowland, Lancs & Yorks...	936	101	38	370	525	41
Cannock, Staffs	6,125	7	10	5,853	219	53
Cartmel, Lancs	883	54	1	144	695	44
Causeway Wood, Salop ...	278	—	96	222	56	—
Charnwood, Leicester ...	275	—	36	267	8	—
Corvedale, Salop	351	21	29	266	70	15
Cotgrave, Notts	529	22	—	389	139	1
Dalton, Westmorland & Lancs	986	29	65	805	95	86
Delamere, Cheshire* ...	2,092	—	37	1,984	86	22
Ennerdale, Cumberland ...	7,663	—	—	2,607	95	4,961
Foremark Woods, Derby...	479	—	30	42	437	—
Foulshaw Wood, Westmorland	600	36	—	199	401	—

Appendix 11—continued

Forest	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Gisburn, Yorks	3,040	112	—	2,737	178	125
Greystoke, Cumberland	2,047	—	15	1,800	5	242
Grizedale, Lancs	7,229	84	176	5,129	1,246	854
Habberley, Salop	841	—	152	637	183	21
Hardknott, Cumberland & Lancs	8,292	—	25	1,651	544	6,097
Hope, Derby	2,988	12	—	694	321	1,973
Inglewood, Cumberland	1,812	—	119	603	1,160	49
Irton, Cumberland	660	96	—	422	192	46
Kershope, Cumberland	12,522	234	—	9,616	98	2,808
Kinver, Staffs	1,026	8	22	621	375	30
Long Mynd, Salop	926	—	18	736	144	46
Longtown, Cumberland	369	39	—	275	28	66
Lyth, Westmorland	629	—	22	22	231	376
Matlock, Derby	1,253	71	—	325	926	2
Mortimer, Hereford & Salop	8,582	—	20	8,209	39	334
Oakamoor, Staffs	1,047	—	86	428	616	3
Packington, Warwick	491	—	17	190	301	—
Sherwood, Derby, Notts & Yorks	14,941	18	515	12,366	2,206	369
Spadeadam, Cumberland	8,909	714	—	1,898	2,101	4,910
Swynnerton, Staffs	2,160	—	193	1,738	401	21
Thornthwaite, Cumberland	5,768	—	61	4,200	413	1,155
Walcot, Salop	1,656	—	26	1,596	43	17
Walton Woods, Cumberland	306	—	—	23	283	—
NORTH EAST CONSERVANCY:						
TOTAL	227,310	5,609	1,470	129,483	33,107	64,720
Allendale, Northumberland	290	—	—	—	286	4
Allerston, Yorks	10,599	22	48	9,384	461	754
Ampleforth, Yorks	5,174	73	101	3,097	1,819	258
Arkengarthdale, Yorks	1,599	—	—	1,120	343	136
Bingley, Yorks	57	—	—	—	57	—
Cawthorne, Yorks	605	—	32	140	465	—
Chillingham, Northumberland	775	—	84	548	203	24
Chopwell, Durham*	2,076	—	145	1,349	620	107
Cleveland, Yorks	4,078	273	110	1,609	2,417	52
Doncaster, Yorks	1,014	—	78	664	343	7
Fountains, Yorks	1,143	—	44	179	960	4
Hambleton, Yorks	3,535	136	84	1,086	2,259	190
Hamsterley, Durham	6,098	—	6	5,463	307	328
Harwood, Northumberland	6,920	167	—	3,396	2,432	1,092
Hebden Royd, Yorks	739	—	—	—	718	21
Holmfirth, Yorks	904	20	—	106	742	56
Jervaulx, Yorks	1,624	67	43	582	1,038	4
Kidland, Northumberland	2,085	434	50	1,491	551	43
Kielder, Northumberland	72,533	1,214	17	43,500	2,522	26,511
Knaresborough, Yorks	680	—	34	523	157	—
Langdale, Yorks	14,810	158	38	5,844	946	8,020
Londesborough, Yorks	764	23	66	381	368	15
Ray, Northumberland	1,996	267	—	1,729	232	35
Redesdale, Northumberland	17,740	280	—	11,622	117	6,001
Rievaulx, Yorks	3,173	39	—	276	2,692	205
Rosedale, Yorks	11,690	575	26	6,646	1,660	3,384
Rothbury, Northumberland	4,012	131	80	2,474	1,167	371
Scardale, Yorks	1,059	—	15	683	87	289

Appendix 11—continued

Forest	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Selby, Yorks	1,410	—	27	942	466	2
Slaley, Northumberland & Durham	2,410	23	57	1,384	875	151
Tong Woods, Yorks	195	—	—	159	36	—
Wark, Northumberland	36,448	1,707	—	20,659	2,720	13,069
Weardale, Durham	4,386	—	—	—	965	3,421
Wharnccliffe, Yorks	1,105	—	72	572	475	58
Widehaugh, Northumberland	70	—	—	—	—	70
Wynyard, Durham	1,628	—	96	748	875	5
York, Yorks	1,886	—	117	1,127	726	33
EAST CONSERVANCY:						
TOTAL	111,541	373	2,572	85,566	13,200	12,775
Amphill, Beds	1,429	13	69	640	708	81
Bardney, Lincs	3,980	—	136	3,492	352	136
Beechwood, Beds & Herts	474	—	51	149	325	—
Bernwood, Oxon	1,483	7	114	643	840	—
Bramfield, Herts	1,096	—	50	635	440	21
Burwell, Lincs	650	67	24	576	72	2
Chilterns, Bucks & Oxon...	3,472	8	271	2,000	1,414	58
Ditton, Cambridge	319	—	52	187	132	—
Dunwich, Suffolk	1,639	3	47	1,311	297	31
Eynsford, Norfolk... ..	617	12	9	554	46	17
Gaywood, Norfolk	1,003	38	45	570	413	20
Hazelborough, Bucks & Northants*	2,560	—	17	2,124	85	351
Hevingham, Norfolk	1,241	17	114	830	396	15
Holt, Norfolk	852	7	68	717	60	75
Honeywood, Essex	957	—	70	79	868	10
Huntingdon, Hunts & Cambs	551	—	4	62	489	—
Kesteven, Lincs & Rutland	4,720	18	166	2,984	1,322	414
The King's Forest, Suffolk	6,054	1	1	5,199	186	669
Laughton, Lincs	2,144	15	16	2,041	51	52
Lavenham, Suffolk	623	5	83	117	506	—
Nassburgh, Northants	332	—	40	185	34	113
Pytchley, Northants	346	—	80	247	99	—
Rendlesham, Suffolk	4,768	2	46	3,739	61	968
Rockingham, Northants	5,948	3	235	4,984	483	481
Salcey, Bucks & Northants*	1,337	—	33	1,253	53	31
Shouldham, Norfolk	1,290	9	—	1,061	145	84
Swaffham, Norfolk	3,813	—	—	3,286	5	522
Swanton, Norfolk	843	13	12	670	2	171
Thetford Chase, Norfolk & Suffolk	44,059	93	156	35,883	1,251	6,925
Tunstall, Suffolk	3,158	—	32	2,875	18	265
Walden, Essex	899	14	87	327	546	26
Walsham, Norfolk	811	—	116	602	203	6
Waveney, Suffolk & Norfolk	441	1	50	326	76	39
Whaddon Chase, Bucks	453	—	49	67	386	—
Wigsley, Lincs & Notts	2,184	—	97	1,559	229	396
Willingham, Lincs... ..	2,573	6	80	2,056	417	100
Yardley Chase, Beds & Northants	2,422	21	52	1,536	190	696

Appendix 11—continued

Forest	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
SOUTH EAST CONSERVANCY:						
TOTAL	60,128	173	2,330	41,922	15,812	2,394
Abinger, Surrey	1,156	—	11	471	524	161
Alice Holt, Hants & Surrey*	2,342	—	36	2,017	39	286
Alton, Hants	1,080	—	—	811	156	113
Andover, Hants	1,629	—	83	1,049	433	147
Arundel, Sussex	2,553	10	83	2,255	268	30
Ashley Hill, Berks... ..	401	10	20	234	164	3
Badbury, Berks	578	—	59	230	348	—
Basing, Hants	211	—	—	204	7	—
Bedgebury, Kent & Sussex*	2,375	—	74	2,102	55	218
Bere, Hants*	1,755	—	53	1,527	202	26
Bishopstoke, Hants	404	—	50	285	118	1
Bramshill, Berks & Hants...	4,531	5	52	4,083	341	107
Brightling, Sussex	2,023	18	90	700	1,306	17
Bucklebury, Berks... ..	285	—	22	223	62	—
Challock, Kent	2,378	4	84	1,713	659	6
Charlton, Sussex	2,627	—	112	1,816	811	—
Chiddingfold, Surrey & Sussex	2,224	—	49	2,030	187	7
Chilworth, Hants	1,122	—	16	72	1,046	4
Corhampton, Hants	525	—	110	166	359	—
Crawley, Hants	329	—	—	316	13	—
Effingham, Surrey	497	—	52	244	252	1
Friston, Sussex	1,986	—	—	1,723	238	25
Gravetye, Sussex	910	—	14	335	82	493
Groombridge, Sussex & Kent	152	—	6	109	35	8
Havant, Hants	1,343	—	96	448	893	2
Hemsted, Kent	1,024	—	29	985	5	34
Hursley, Hants	2,412	—	155	1,360	1,052	—
Joydens Wood, Kent	333	—	31	34	299	—
Lyminge, Kent	2,583	6	68	2,418	107	58
Marden, Sussex	1,200	16	15	901	198	101
Maresfield, Sussex... ..	738	—	66	383	353	2
Micheldever, Hants	3,046	12	170	2,416	571	59
Mildmay, Kent	272	—	11	188	84	—
Orlestone, Kent	1,085	—	38	893	190	2
Pen, Hants	314	—	15	137	174	3
Queen Elizabeth Forest, Hants & Sussex... ..	2,622	—	65	1,563	785	274
Rochester, Kent	536	37	11	48	465	23
Rogate, Sussex	600	—	40	418	146	36
St. Leonards, Sussex	1,413	—	73	580	805	28
Shipbourne, Kent	458	—	41	281	175	2
Slindon, Sussex	1,358	55	—	1,102	256	—
Southwater, Sussex	579	—	—	401	158	20
Vinehall, Sussex	1,452	—	90	1,080	331	41
Westbury, Hants	490	—	—	477	3	10
Westerham, Kent & Surrey	381	—	16	56	320	5
Wilmington, Sussex	881	—	106	491	352	38
Winterfold, Surrey	321	—	95	265	56	—
Witley Park, Surrey	612	—	23	282	329	1
Woking Office Grounds ...	2	—	—	—	—	2

Appendix 11—continued

Forest	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
SOUTH WEST CONSERVANCY:						
TOTAL	78,100	534	1,713	54,854	17,992	5,254
Aconbury, Hereford ...	613	—	—	88	525	—
Bampton, Devon	348	—	—	96	252	—
Bentley, Hants & Wilts ...	3,102	11	164	1,021	2,069	12
Blackdown Woods, Dorset	262	—	—	—	235	27
Blandford, Dorset	2,826	—	176	1,537	1,076	213
Bodmin, Cornwall... ..	1,491	—	23	1,264	61	166
Bradon, Wilts	1,828	—	64	1,242	468	118
Brendon, Somerset	2,817	2	50	2,265	256	296
Bruton, Somerset & Wilts...	1,035	—	37	1,004	24	7
Charmouth, Devon & Dorset	942	32	9	684	213	45
Collingbourne, Wilts	1,239	—	—	1,221	7	11
Cowley Woods, Gloucester	493	—	20	156	336	1
Croft Pascoe, Cornwall	112	—	—	13	99	—
Dartmoor, Devon	2,287	—	—	1,686	3	598
Dunster, Somerset... ..	2,022	10	42	1,190	231	601
Dymock, Gloucester & Hereford*	1,720	19	—	1,551	97	72
Eggesford, Devon	1,207	23	16	983	206	18
Erme, Devon	641	—	26	182	457	2
Fernworthy, Devon	1,505	—	1	1,501	—	4
Gardiner, Dorset & Wilts...	1,751	24	94	1,108	626	17
Glynn, Cornwall	2,518	—	50	2,019	367	132
Haldon, Devon	3,874	6	132	3,443	379	52
Halwill, Devon	4,582	—	4	3,779	115	688
Hartland, Devon & Cornwall	2,095	—	35	1,719	267	109
Haugh, Hereford	1,008	—	28	829	159	20
Herodsfoot, Cornwall	817	—	50	705	86	26
Honiton, Devon	1,287	114	25	536	722	29
Lydford, Devon	639	—	4	549	48	42
Mendip, Somerset	1,223	1	83	1,025	115	83
Middlemarsh Woods, Dorset	331	—	—	3	328	—
Moccas, Hereford	866	30	35	251	615	—
Molton Woods, Devon	800	6	21	279	521	—
Neroche, Somerset & Devon	2,445	80	12	1,011	1,374	60
Okehampton, Devon	519	—	—	476	4	39
Pershore, Worcs	375	—	25	139	235	1
Plym, Devon	1,686	—	46	1,397	285	4
Poorstock, Dorset	1,560	11	25	408	1,152	—
Purbeck, Dorset	1,595	59	26	1,385	109	101
Quantock, Somerset	2,766	—	61	2,269	143	354
St. Clement, Cornwall	281	—	15	271	5	5
Savernake, Wilts & Berks...	4,443	—	40	2,707	1,457	279
Sedgemoor, Somerset	431	18	7	305	126	—
Shepton, Somerset... ..	160	—	—	155	3	2
Stanway, Gloucester	1,150	4	3	402	104	644
Stokeleigh, Somerset	639	—	24	465	168	6
Wareham, Dorset	5,870	51	131	4,272	1,480	118
West Woods, Wilts	978	2	6	909	—	69
Wilsey Down, Cornwall	1,346	—	46	1,178	104	64
Wyre, Worcester & Hereford	3,575	31	57	3,176	280	119

Appendix 11—continued

Forest	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NEW FOREST:						
TOTAL	77,161	165	348	32,689	2,045	42,427
Brighstone, Isle of Wight ...	1,529	—	22	1,290	51	188
Combley, Isle of Wight ...	559	—	—	548	—	11
Ferndown, Dorset... ..	1,641	—	13	1,005	131	505
Hurn, Hants	1,870	110	—	782	395	693
New Forest, Hants* ...	65,446	—	226	23,833	1,211	40,402
Osborne, Isle of Wight ...	233	—	12	167	59	7
Parkhurst, Isle of Wight*...	1,312	—	28	1,007	—	305
Ringwood, Dorset & Hants	3,962	—	47	3,737	—	225
Shalfleet, Isle of Wight ...	507	55	—	320	96	91
Not yet allocated	102	—	—	—	102	—
DEAN FOREST:						
TOTAL	27,062	4	253	21,694	1,554	3,814
Dean Forest, Gloucester, Hereford & Monmouth*	25,261	2	205	20,187	1,321	3,753
Tidenham Chase, Gloucester	1,801	2	48	1,507	233	61

AREA STATEMENT OF LAND USE: BY FORESTS—SCOTLAND

Appendix 12 At 30th September, 1957 Acres

Forest	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NORTH CONSERVANCY:						
TOTAL	467,975	3,637	3,520	122,538	50,283	295,154
Achnasheen, Ross	754	10	94	251	363	140
Achnashellach Ross ...	19,674	3	—	930	24	18,720
Aigas, Inverness	1,593	75	—	555	379	659
Ardross, Ross	6,433	258	2	4,311	971	1,151
Assich, Nairn	1,326	—	—	800	304	222
Balblair, Sutherland & Ross	6,234	—	153	1,713	607	3,914
Battan, Inverness	2,167	52	104	1,405	415	347
Boblainy, Inverness ...	2,690	—	184	2,438	152	100
Borgie, Sutherland	2,706	—	60	1,290	23	1,393
Ceannacroc, Inverness ...	19,881	143	110	1,668	2,447	15,766
Clach Liath, Ross	2,280	142	30	1,080	799	401
Clunes, Inverness	7,261	160	88	1,861	819	4,581
Craig Phadrig, Inverness ...	211	—	—	203	—	8
Craigs, Ross	2,022	227	—	1,385	524	113
Creag nan Eun, Inverness	1,922	—	—	1,364	6	552
Culloden, Inverness	2,447	—	16	2,362	32	53
Dornoch, Sutherland	2,844	—	150	930	485	1,429
Dunnet, Caithness	879	65	—	241	567	71
Eilanreach, Inverness ...	922	—	—	829	—	93
Farigaig, Inverness	7,019	—	200	1,970	1,482	3,567
Ferness, Nairn	1,538	—	—	1,018	9	511

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Findon, Ross	2,367	—	—	2,244	11	112
Fiunary, Argyll	18,338	126	34	4,449	1,866	12,023
Glen Affric, Inverness	53,254	—	551	3,895	5,015	44,344
Glen Brittle, Skye, Inverness	8,858	5	—	1,578	2	7,278
Glen Cripesdale, Argyll	6,650	53	10	323	1,845	4,482
Glen Garry, Inverness	23,028	147	30	4,881	957	17,190
Glen Hurich, Argyll	15,180	—	—	3,058	743	11,379
Glen Loy, Inverness	2,546	8	—	1,946	101	499
Glen Righ, Inverness	5,883	12	—	2,508	22	3,353
Glen Shiel, Ross	3,653	—	—	763	—	2,890
Glen Urquhart, Inverness... ..	16,276	4	251	3,642	1,484	11,150
Glen Varragill, Skye, Inverness	8,530	103	—	288	412	7,830
Guisachan, Inverness	5,644	58	109	1,949	1,053	2,642
Healaval, Skye, Inverness... ..	1,265	107	—	218	709	338
Inchnacardoch, Inverness... ..	9,351	106	—	2,444	374	6,533
Inshriach, Inverness	16,180	299	59	2,915	3,604	9,661
Inverinate, Ross	1,234	—	—	1,038	—	196
Kessock, Ross	1,666	100	—	1,180	181	305
Kilcoy, Ross	3,564	—	20	2,959	135	470
Lael, Ross	3,583	73	53	2,166	492	925
Laiken, Nairn	838	—	2	823	3	12
Leanachan, Inverness	19,137	2	65	2,935	3,472	12,730
Longart, Ross	1,522	40	—	1,261	185	76
Millbuie, Ross	7,336	1	—	6,730	9	597
Morangie, Ross	7,562	—	350	4,853	968	1,741
Naver, Sutherland	16,908	—	—	—	5,151	11,757
Nevis, Inverness	7,659	—	—	977	3	6,679
North Strome, Ross	1,969	—	—	863	49	1,057
Oykell, Ross & Sutherland	4,581	193	57	1,236	2,607	738
Portclair, Inverness	5,500	—	—	2,347	6	3,147
The Queen's Forest, Inverness	12,500	—	30	3,227	65	9,208
Raasay, Isle of Raasay, Inverness	732	10	—	529	25	178
Ratagan, Inverness & Ross	5,472	—	—	1,590	530	3,352
Rumster, Caithness	2,362	32	—	866	34	1,462
Salen, Mull, Argyll	23,992	261	36	4,744	2,100	17,148
Shin, Sutherland	14,086	389	33	3,041	495	10,550
Slattadale, Ross	1,395	30	—	867	—	528
South Laggan, Inverness	4,195	—	—	1,110	—	3,085
South Strome, Ross	3,556	34	—	1,246	2	2,308
Strath Conon, Ross	3,289	40	60	1,975	710	604
Strath Dearn, Inverness	4,191	84	51	2,291	169	1,731
Strath Mashie, Inverness	4,542	10	158	1,155	2,218	1,169
Strath Nairn, Inverness	2,437	45	—	1,145	53	1,239
Strathy, Sutherland	804	52	—	214	367	223
Sunart, Argyll	2,569	78	40	1,109	920	540
Torrachilty, Ross	7,941	—	300	1,424	724	5,793
Urray, Ross	999	—	30	886	4	109
Hoy Experiments, Orkney	32	—	—	32	—	—
Lewis Experiments, Isle of Lewis, Ross	16	—	—	14	—	2
EAST CONSERVANCY:						
TOTAL	230,510	3,270	3,036	135,107	36,519	58,884
Allean, Perth	9,889	196	17	2,026	2,494	5,369
Alltcailleach, Aberdeen	3,806	—	—	3,487	230	89

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Benachie, Aberdeen ...	6,421	—	178	2,971	1,044	2,406
Bin, Aberdeen & Banff ...	8,599	108	97	5,947	1,651	1,001
Blackcraig, Perth ...	2,451	65	—	1,631	327	493
Blackhall, Kincardine ...	4,684	23	22	2,805	1,743	136
Blairadam, Fife & Kinross	2,188	5	25	1,832	118	238
Carden, Fife ...	547	—	—	536	2	9
Clashindarroch, Aberdeen	18,396	396	—	10,652	1,449	6,295
Countesswells, Aberdeen & Kincardine ...	877	—	23	664	164	49
Craigvinean, Perth ...	4,435	12	34	3,421	23	991
Culbin, Moray & Nairn ...	7,738	96	106	7,198	34	506
Dallas, Moray ...	2,081	9	48	1,020	332	729
Forest of Deer, Aberdeen...	3,456	—	6	2,210	802	444
Delgaty, Aberdeen & Banff	1,427	—	190	1,244	179	4
Drummond Hill, Perth ...	7,416	2	130	4,270	586	2,560
Drumtochty, Kincardine ...	9,685	361	—	4,111	3,657	1,917
Durris, Aberdeen & Kincardine	4,614	—	101	4,143	177	294
Edensmuir, Fife ...	1,745	11	7	1,574	32	139
Elchies, Moray ...	4,355	54	171	835	2,252	1,268
Faskally, Perth ...	1,043	—	28	248	677	118
Fetteresso, Kincardine ...	8,463	204	110	4,943	954	2,566
Fonab, Perth ...	2,237	157	—	1,131	609	497
Glendevon, Perth & Kinross	915	—	—	876	—	39
Glendoll, Angus ...	3,713	128	—	763	715	2,235
Glenerrochty, Perth ...	2,509	38	41	707	994	808
Glenisla, Angus & Perth ...	11,492	76	—	2,589	3,246	5,657
Glenlivet, Banff ...	7,446	507	—	5,668	602	1,176
Glenprosen, Angus ...	8,326	83	—	108	1,392	6,826
Hallyburton, Angus & Perth	2,123	17	60	1,953	143	27
Inglismaldie, Angus & Kincardine	1,413	—	113	1,291	115	7
Keillour, Perth ...	2,232	—	77	1,787	381	64
Kemnay, Aberdeen ...	1,369	—	49	1,314	38	17
Kinfauns, Perth ...	826	—	20	794	31	1
Kirkhill, Aberdeen ...	2,064	—	42	1,902	25	137
Ledmore, Perth ...	117	—	—	—	—	117
Lossie, Moray ...	1,904	—	—	1,669	3	232
Midmar, Aberdeen ...	2,110	—	59	1,115	664	331
Monaughty, Moray ...	4,345	—	—	3,820	167	358
Montreathmont, Angus ...	2,783	14	112	2,523	215	45
Newton, Moray ...	175	—	—	—	—	175
Newtyle, Moray ...	1,928	—	2	1,718	25	185
Pitfichie, Aberdeen ...	7,110	233	196	4,900	927	1,283
Pitmedden, Fife & Perth ...	2,118	—	63	1,930	71	117
Rannoch, Perth ...	5,122	7	144	2,326	2,013	783
Rosarie, Banff ...	6,536	80	211	4,479	744	1,313
Roseisle, Moray ...	2,026	—	—	1,964	—	62
Sootmore, Banff & Moray	820	—	8	817	—	3
Speymouth, Moray & Banff	12,756	238	380	9,130	2,142	1,484
Strathord, Perth ...	1,608	70	40	1,262	342	4
Teindland, Moray ...	3,155	—	106	2,145	247	763
Tentsmuir, Fife ...	4,025	—	20	3,370	6	649
Tornashean, Aberdeen ...	9,388	80	—	2,078	1,735	5,575
Whitehaugh, Aberdeen ...	1,503	—	—	1,210	—	293

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural Unplantable, &c.
SOUTH CONSERVANCY:						
TOTAL	255,097	7,472	1,489	111,680	52,808	90,609
Forest of Ae, Dumfries ...	12,639	508	—	11,061	1,005	573
Arcleoch, Ayrshire ...	3,236	—	—	—	2,843	393
Auchenroddan, Dumfries...	777	—	—	751	—	26
Bareagle, Wigtown ...	2,385	74	50	526	1,567	292
Brownmoor, Dumfries ...	828	—	53	511	307	10
Cairn Edward, Kirkcudbright	28,482	1,401	1	12,017	6,522	9,943
Cardrona, Peebles ...	1,859	—	—	1,413	—	446
Carrick, Ayr ...	32,605	563	249	6,545	2,559	23,501
Castle O'er, Dumfries & Selkirk	8,691	208	2	7,328	472	891
Change, Ayr	2,389	—	81	1,739	2	648
Clauchrie, Dumfries ...	639	—	—	567	5	67
Clydesdale, Lanark ...	897	11	44	343	537	17
Corriedoo, Kirkcudbright...	1,022	9	—	964	12	46
Craik, Roxburgh & Selkirk	4,443	60	12	3,751	178	514
Dalbeattie, Kirkcudbright	6,310	178	78	4,637	1,149	524
Dalmacallan, Dumfries ...	1,970	86	139	1,486	384	100
Dreva, Peebles	1,354	10	140	726	601	27
Dundeugh, Kirkcudbright	5,964	378	—	3,422	1,656	886
Duns, Berwick	1,018	86	42	552	463	3
Edgarhope, Berwick & Midlothian	1,776	—	41	1,201	67	508
Elibank & Traquair, Selkirk & Peebles	5,594	353	2	3,169	1,483	942
Fleet, Kirkcudbright ...	1,375	17	30	1,208	23	144
Garcrogo, Kirkcudbright...	1,914	—	29	1,535	163	216
The Garraries, Kirkcudbright	7,712	2	—	564	4,594	2,554
Glengap, Kirkcudbright ...	2,266	100	5	1,876	200	190
Glentress, Peebles	2,717	—	4	1,969	363	385
Glen Trool, Kirkcudbright & Ayr	55,641	1,010	6	11,300	8,239	36,102
Greskine, Dumfries	3,351	74	149	2,257	835	259
Kilgrammie, Ayr	570	—	7	563	6	1
Kilsture, Wigtown... ..	511	—	—	507	—	4
Kirroughtree, Kirkcudbright	10,525	354	15	5,000	2,704	2,821
Laurieston, Kirkcudbright	4,533	392	—	2,949	555	1,029
Mabie, Kirkcudbright & Dumfries... ..	3,569	99	33	2,601	749	219
Newcastleton, Roxburgh & Dumfries... ..	7,753	244	—	4,893	2,469	391
Penninghame, Wigtown ...	5,430	325	25	2,227	1,646	1,557
Saltoun, East Lothian & Midlothian	834	—	75	278	514	42
Selm Muir, Midlothian & West Lothian	589	—	75	305	275	9
Stenton, East Lothian & Berwick	1,137	—	75	561	536	40
Upper Nithsdale, Dumfries	1,028	—	—	28	962	38
Watermeetings, Lanark ...	3,140	295	—	295	1,392	1,453
Wauchope, Roxburgh ...	13,244	473	10	6,611	3,884	2,749
Yair Hill, Selkirk & Roxburgh	2,341	162	17	1,432	887	22
Bush Nursery, Midlothian	9	—	—	—	—	9
Whittingehame Seed Orchard, East Lothian	30	—	—	12	—	18

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
WEST CONSERVANCY:						
TOTAL	276,570	3,209	1,063	112,539	21,318	142,713
Achaglachgach, Argyll ...	2,508	16	74	1,797	388	323
Ardfin, Jura, Argyll ...	1,179	40	—	143	813	223
Ardgartan, Argyll ...	20,974	264	—	4,950	1,832	14,192
Asknish, Argyll ...	5,900	—	—	3,745	—	2,155
Barcaldine, Argyll ...	6,024	112	—	4,086	170	1,768
Benmore, Argyll ...	9,585	75	—	3,043	300	6,242
Carradale, Argyll ...	10,919	81	16	4,733	130	6,056
Carron Valley, Stirling ...	6,637	—	—	4,485	36	2,116
Corlarach, Argyll ...	4,880	178	—	2,257	71	2,552
Creran, Argyll ...	2,031	—	69	193	1,337	501
Cumbernauld, Dunbarton	904	104	—	117	609	178
Dalmally, Argyll ...	3,808	136	44	998	2,416	394
Devilla, Fife & Clackmannan	3,200	57	190	2,224	880	96
Fearnoch, Argyll ...	1,342	—	—	1,129	4	209
Garadhban, Stirling ...	1,297	—	28	1,204	41	52
Garelochhead, Dunbarton	1,003	80	—	612	255	136
Garshelloch, Stirling ...	424	—	29	367	57	—
Glenbranter, Argyll ...	8,712	82	—	3,519	237	4,956
Glenceo, Argyll ...	380	—	20	312	54	14
Glendaruel, Argyll ...	7,045	146	—	1,985	1,010	4,050
Glenduror, Argyll ...	8,319	—	—	2,666	13	5,640
Glenfinart, Argyll ...	8,712	47	39	3,105	101	5,506
Glenrickard, Arran, Bute-shire ...	2,687	92	—	693	463	1,531
Inverinan, Argyll ...	12,796	124	64	5,121	988	6,687
Inverliever, Argyll*	29,561	175	10	6,245	920	22,396
Kilmartin, Argyll ...	1,563	26	174	305	1,202	56
Kilmichael, Argyll...	10,055	24	51	5,173	63	4,819
Kilmory, Argyll ...	3,218	151	—	2,257	265	696
Knapdale, Argyll ...	19,695	—	22	6,717	27	12,951
Leapmoor, Renfrew ...	539	—	—	130	409	—
Lennox, Stirling ...	778	—	35	633	89	56
Loch Ard, Perth & Stirling	32,284	768	40	17,636	2,677	11,971
Loch Eck, Argyll ...	5,502	1	—	2,413	29	3,060
Minard, Argyll ...	5,327	102	—	3,583	106	1,638
Rowardennan, Stirling ...	9,468	212	8	1,737	1,624	6,107
Saddell, Argyll ...	4,917	—	15	1,511	7	3,399
St. Fillans, Perth ...	1,616	—	104	770	735	111
Strathlachlan, Argyll ...	7,616	—	—	2,702	266	4,648
Strathyre, Perth ...	10,616	5	15	5,792	3	4,821
Tighnabruaich, Argyll ...	1,174	92	—	443	586	145
Torrie, Perth ...	1,157	19	16	996	41	120
Tulliallan, Fife ...	112	—	—	—	—	112
Rannoch Moor Experimental Plot, Argyll ...	106	—	—	12	64	30

AREA STATEMENT OF LAND USE: BY FORESTS—WALES

Appendix 13

At 30th September, 1957

Acres

Forest	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NORTH CONSERVANCY:						
TOTAL	178,715	4,303	2,200	107,501	25,267	45,947
Aberhirnant, Merioneth ...	6,663	290	—	2,822	710	3,131
Aeron, Cardigan	1,889	203	70	944	830	115
Arfon, Caernarvon	399	—	—	—	305	94
Bechan, Montgomery	654	3	62	478	175	1
Beddgelert, Caernarvon ...	3,310	19	27	1,884	308	1,118
Breidden, Montgomery & Salop	701	35	31	364	280	57
Brynmawr, Cardigan	3,924	6	121	2,660	893	371
Carno, Montgomery	924	64	3	867	—	57
Ceiriog, Denbigh	1,566	323	17	971	344	251
Clocaenog, Denbigh & Merioneth	18,680	334	123	11,773	2,409	4,498
Coed Clwyd, Denbigh & Flint	1,869	51	51	1,408	103	358
Coed Sarnau, Radnor	5,640	41	220	4,008	541	1,091
Coed y Brenin, Merioneth	19,271	341	183	10,815	1,296	7,160
Coed y Goror, Denbigh & Salop	1,133	1	1	897	204	32
Commis Coch, Montgomery	1,440	37	76	1,092	98	250
Cynwyd, Merioneth	1,876	—	13	1,653	97	126
Derry Ormond, Cardigan & Carmarthen	1,799	43	62	1,034	560	205
Dovey, Merioneth & Montgomery	17,711	338	126	12,977	1,744	2,990
Dyfnant, Montgomery	8,094	473	—	3,280	1,728	3,086
Elwy, Denbigh & Flint	1,347	—	71	1,154	174	19
Glanllyn, Merioneth	989	76	15	711	238	40
Gwydyr, Caernarvon & Denbigh	19,864	9	90	12,086	542	7,236
Hafod Fawr, Merioneth* ...	2,499	48	45	956	732	811
Hafren, Montgomery	10,949	234	71	7,591	799	2,559
Kerry, Montgomery, Salop & Radnor	2,656	24	14	2,478	52	126
Llangollen, Denbigh	983	5	20	815	157	11
Lleyn, Caernarvon	1,923	63	138	744	1,025	154
Maelor, Flint & Salop	285	—	22	42	183	60
Mathrafal, Montgomery ...	2,541	71	104	1,588	920	33
Myherin, Cardigan	9,704	233	14	3,190	2,141	4,373
Newborough, Anglesey	2,592	137	—	1,372	560	660
Pencerrig, Radnor	171	—	17	38	133	—
Penllyn, Merioneth	932	—	6	682	91	159
Pentraeth, Anglesey	982	51	14	528	425	29
Radnor, Radnor & Hereford	6,345	151	103	4,817	465	1,063
St. Asaph, Denbigh & Flint	968	1	69	640	251	77
Taliesin, Cardigan & Montgomery	6,664	219	82	1,727	3,207	1,730
Tanat, Montgomery & Denbigh	801	183	4	603	127	71
Tarenig, Cardigan & Montgomery	2,913	2	5	1,857	18	1,038
Ystwyth, Cardigan	5,060	194	110	3,955	402	703
Chirk Depot, Denbigh	4	—	—	—	—	4

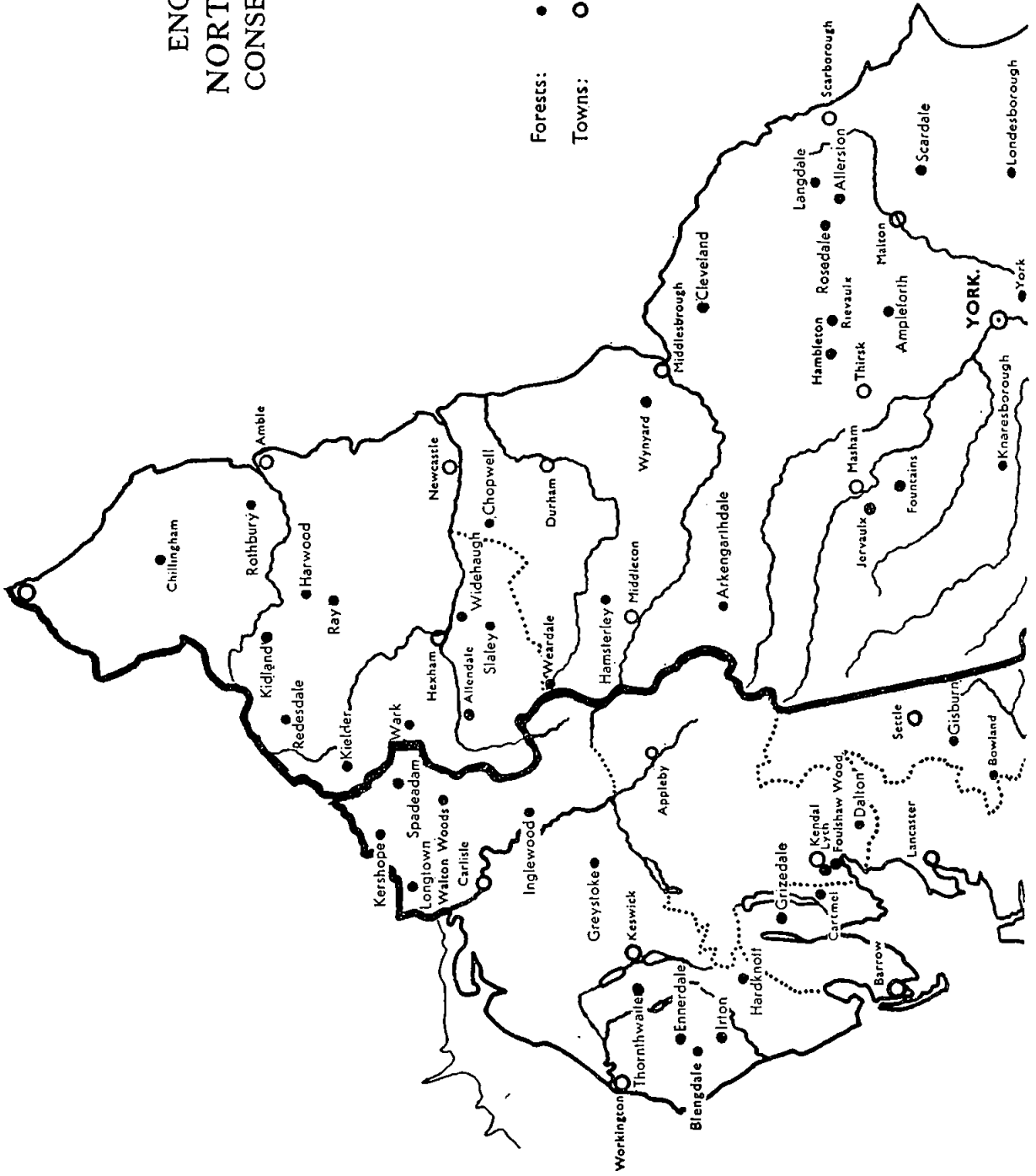
Appendix 13—continued

Forest	Total	Planted during year ended 30th September, 1957		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
SOUTH CONSERVANCY:						
TOTAL	150,869	3,075	2,275	93,811	36,310	20,748
Abergavenny, Monmouth & Brecon	294	19	23	78	215	1
Brechfa, Carmarthen	16,409	318	94	12,494	441	3,474
Brecon, Brecon	1,929	—	—	1,577	53	299
Caeo, Carmarthen... ..	4,683	121	83	3,255	555	873
Chepstow, Monmouth	2,172	8	76	1,765	402	5
Cilgwyn, Carmarthen	1,256	1	123	928	326	2
Cilsant, Carmarthen	349	—	58	204	143	2
Coed Caerdydd, Glamorgan	1,052	—	82	444	591	17
Coed Morgannwg, Glamorgan	37,622	375	457	24,639	6,579	6,404
Coed Taf Fawr, Brecon	3,789	99	29	1,319	1,654	816
Coed y Brithdir, Glamorgan	328	—	20	57	269	2
Coed y Rhaiadr, Brecon	2,510	97	12	1,386	872	252
Conwil Elvet, Carmarthen	217	—	—	3	213	1
Crychan, Brecon & Carmarthen	9,720	264	64	8,011	311	1,398
Daugleddau, Pembroke & Carmarthen	1,819	292	43	736	941	142
Draethen, Glamorgan & Monmouth	1,319	8	53	555	756	8
Ebbw, Monmouth	870	18	16	486	268	116
Gamrhiw, Brecon	1,147	12	46	617	416	114
Giedd, Brecon	746	—	—	574	31	141
Glasfynydd, Brecon & Carmarthen	3,453	87	37	3,296	58	99
Glyn Tarell, Brecon	290	—	—	280	10	—
Gower, Glamorgan	1,082	—	20	414	660	8
Goytre, Monmouth	664	17	28	439	220	5
Hay, Brecon, Hereford & Radnor	1,593	83	—	1,109	379	105
Hensol, Glamorgan	729	—	—	545	89	95
Irfon, Brecon	4,292	141	—	1,045	2,633	614
Llandowror, Carmarthen... ..	559	30	18	426	87	46
Llandeilo, Carmarthen	1,165	13	41	759	282	124
Llanover, Monmouth	4,610	28	52	3,032	1,250	328
Llantrisant, Glamorgan	801	—	61	795	4	2
Machen, Monmouth	1,132	—	109	424	623	85
Monmouth, Monmouth	1,506	—	3	728	689	89
Mynydd Ddu, Brecon & Monmouth	3,119	10	86	2,264	232	623
Nethergwent, Monmouth... ..	535	—	3	137	384	14
Pembrey, Carmarthen	4,680	21	21	1,993	545	2,142
Penllergaer, Glamorgan	601	—	28	497	76	28
St. Gwynno, Glamorgan	4,409	196	31	3,206	501	702
Sirhowy, Monmouth	638	33	—	359	240	39
Slebech, Pembroke	1,927	7	141	1,385	494	48
Taf Fechan, Brecon	1,131	—	19	1,107	2	22
Tair Onen, Glamorgan	189	—	—	52	—	137
Talybont, Brecon	3,860	125	2	2,118	1,612	130
Teifi, Carmarthen & Cardigan	845	8	70	658	186	1
Tintern, Monmouth*	5,161	2	73	4,561	107	493
Towy, Cardigan, Brecon & Carmarthen	11,655	642	—	1,460	9,521	674
Wentwood, Monmouth	2,012	—	153	1,594	390	28

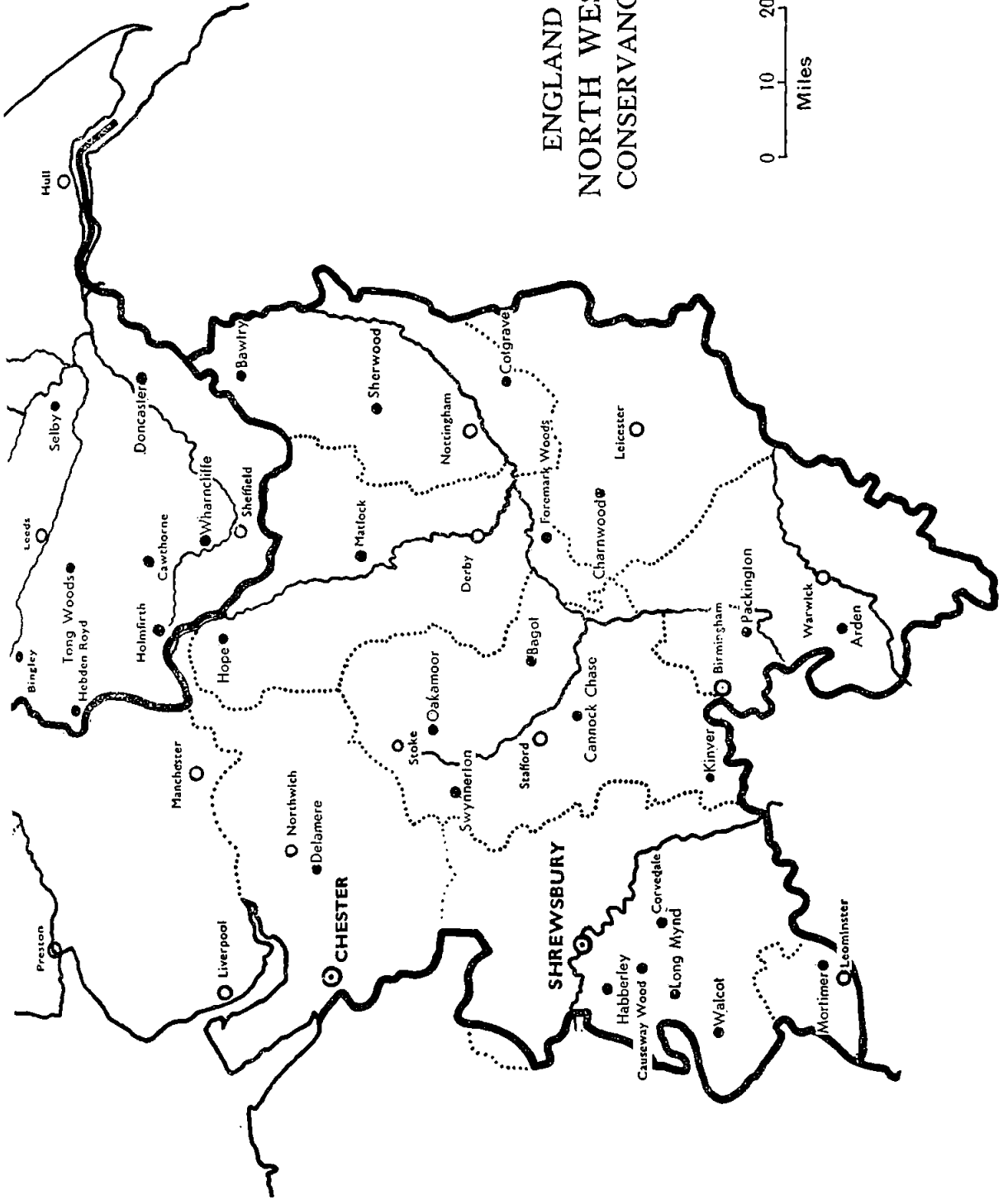
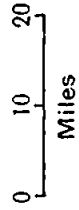
MAPS

Maps showing the distribution of the Commission forests, and the boundaries of the Conservancies, as at 30th September, 1957, follow overleaf.

ENGLAND NORTH EAST CONSERVANCY



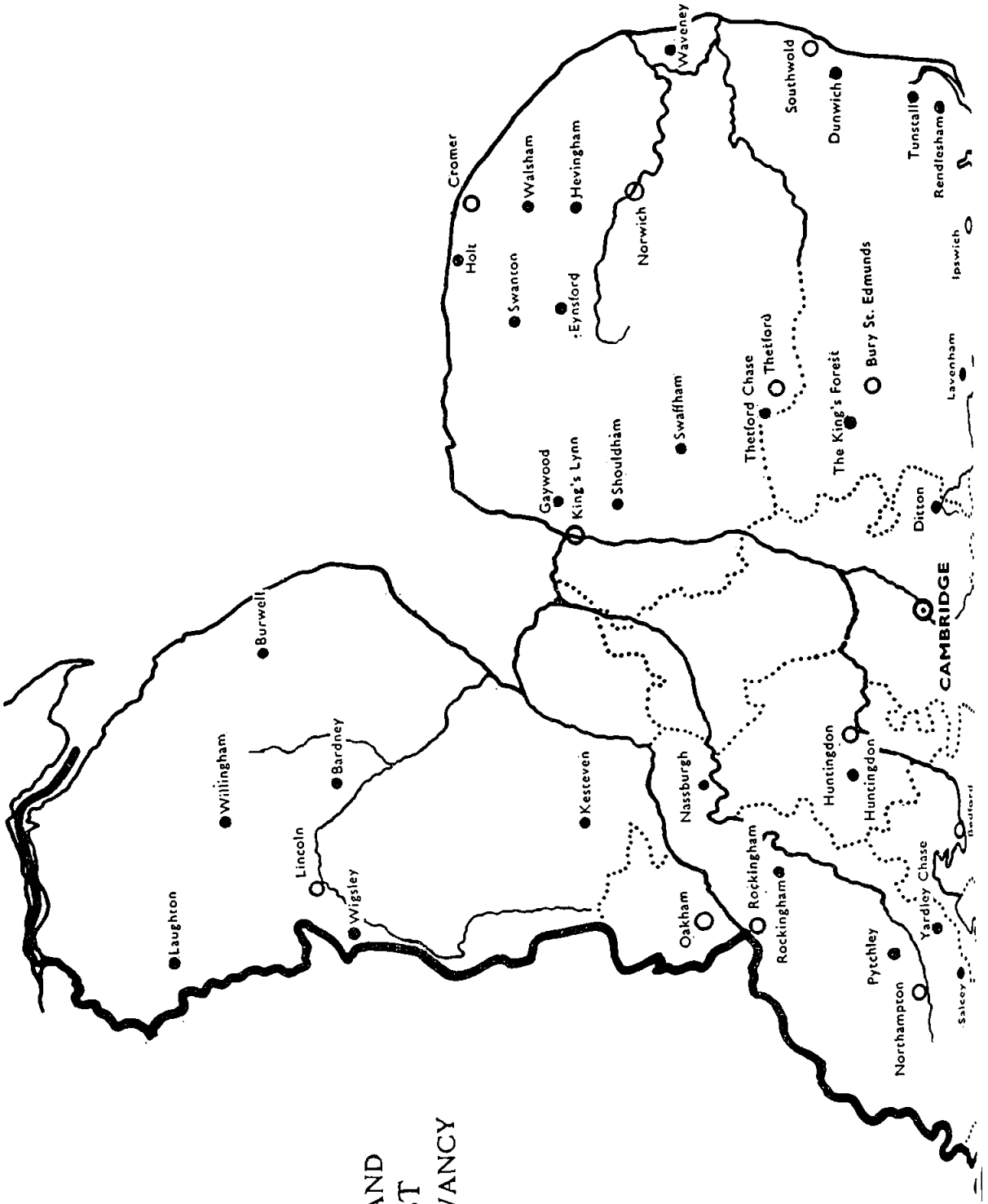
ENGLAND NORTH WEST CONSERVANCY

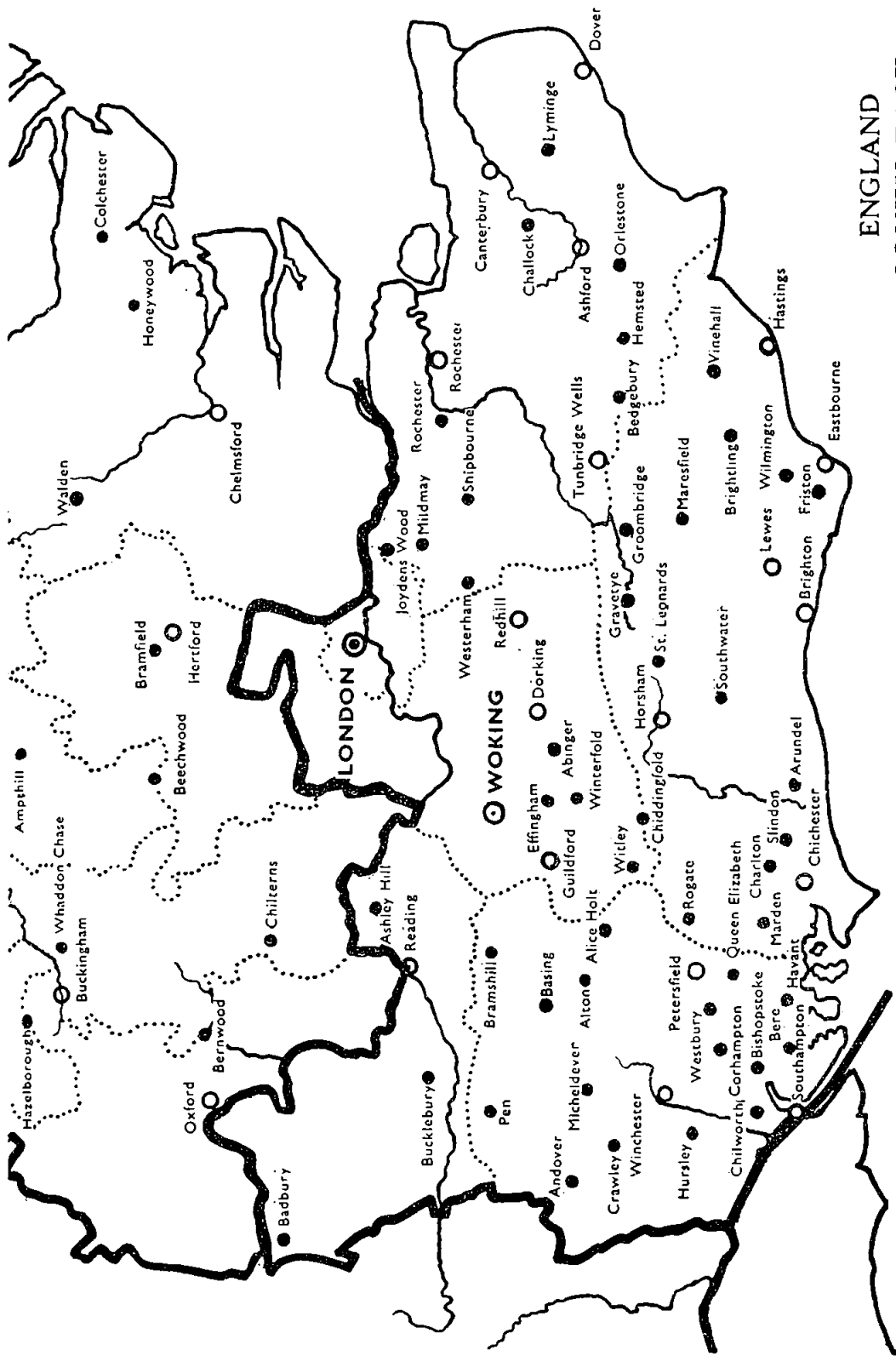


ENGLAND EAST CONSERVANCY

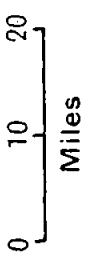
Forests: ●

Towns: ○





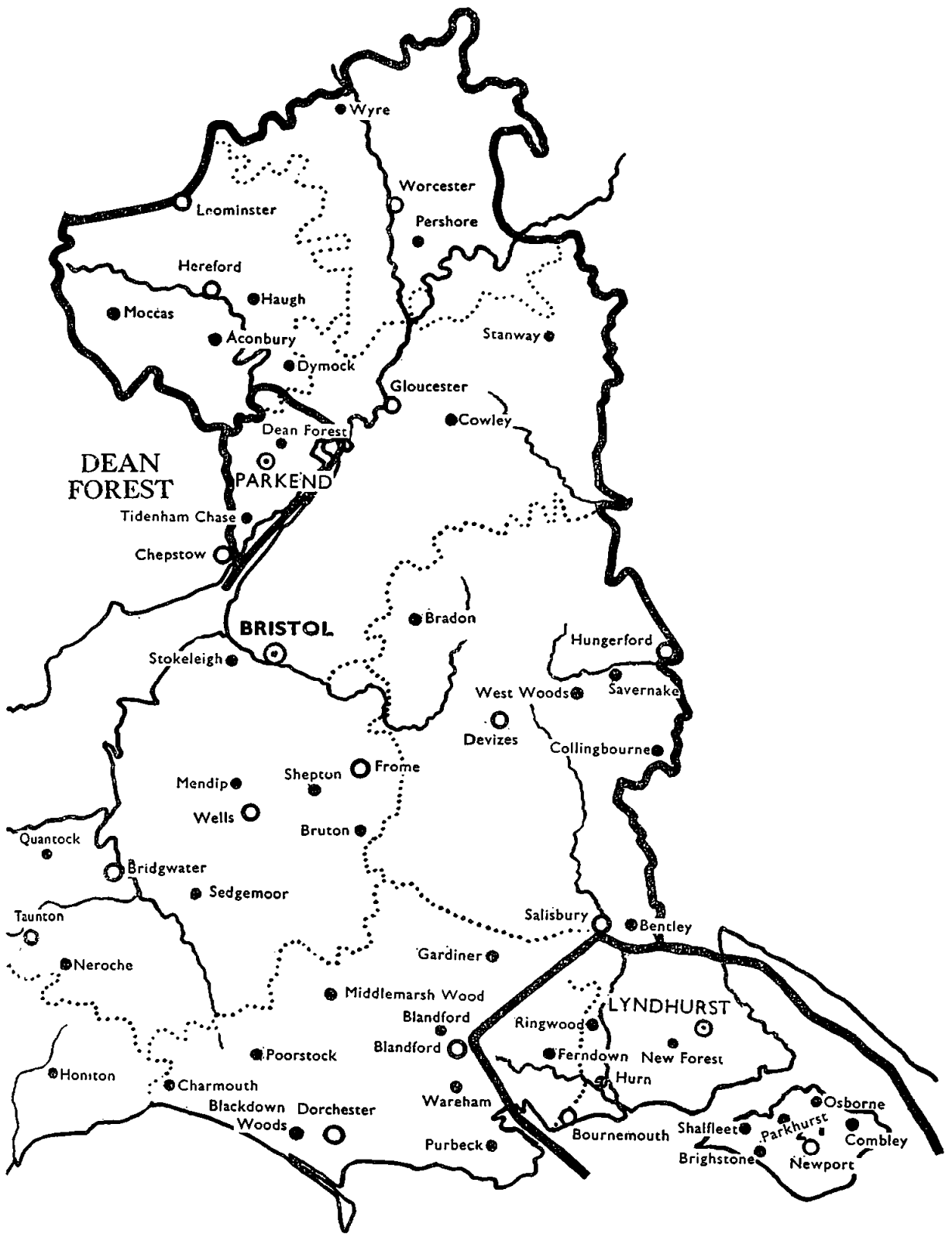
ENGLAND
SOUTH EAST
CONSERVANCY



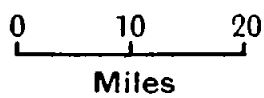
Forests: ●
 Towns: ○

ENGLAND
 SOUTH WEST
 CONSERVANCY



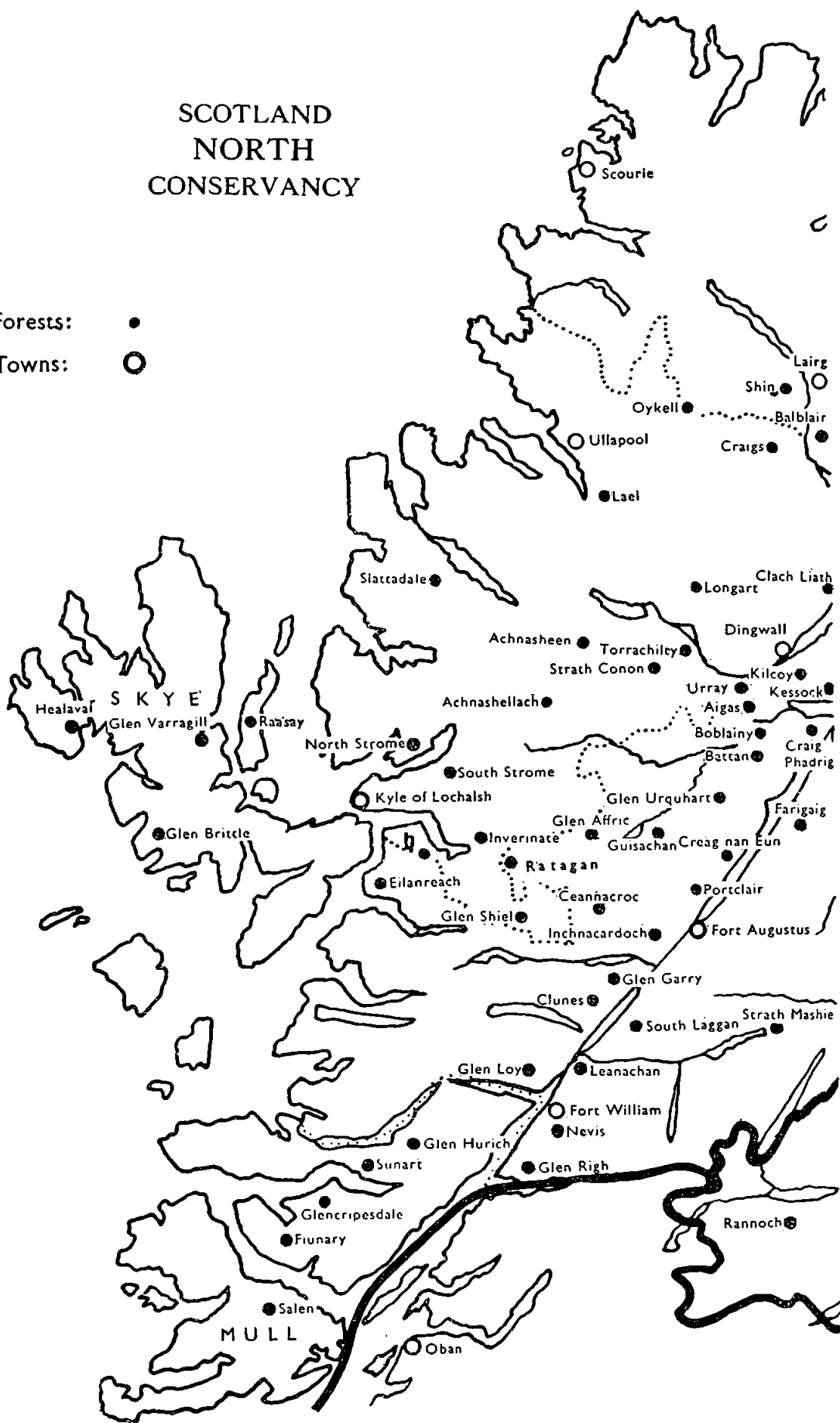


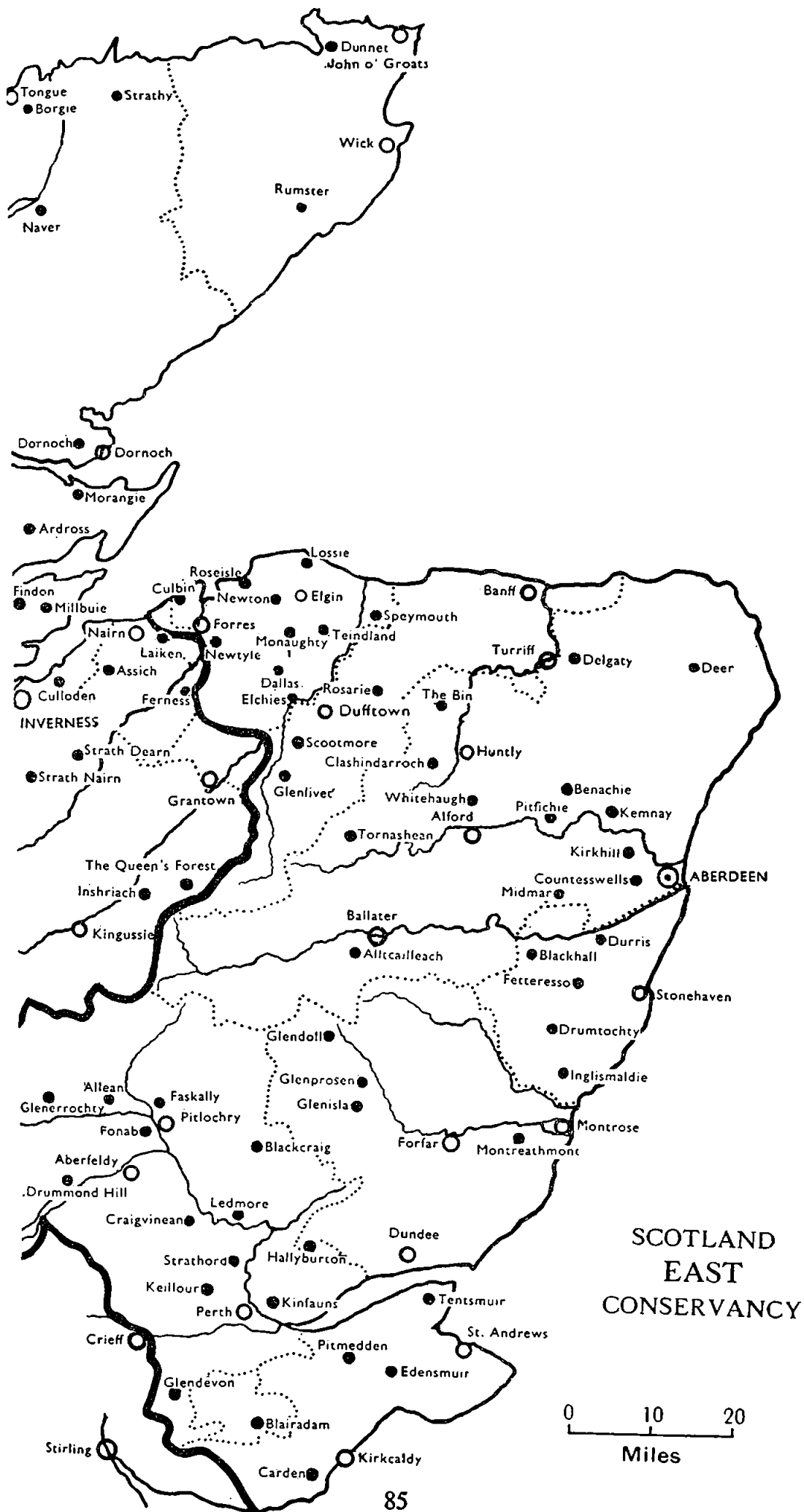
NEW FOREST



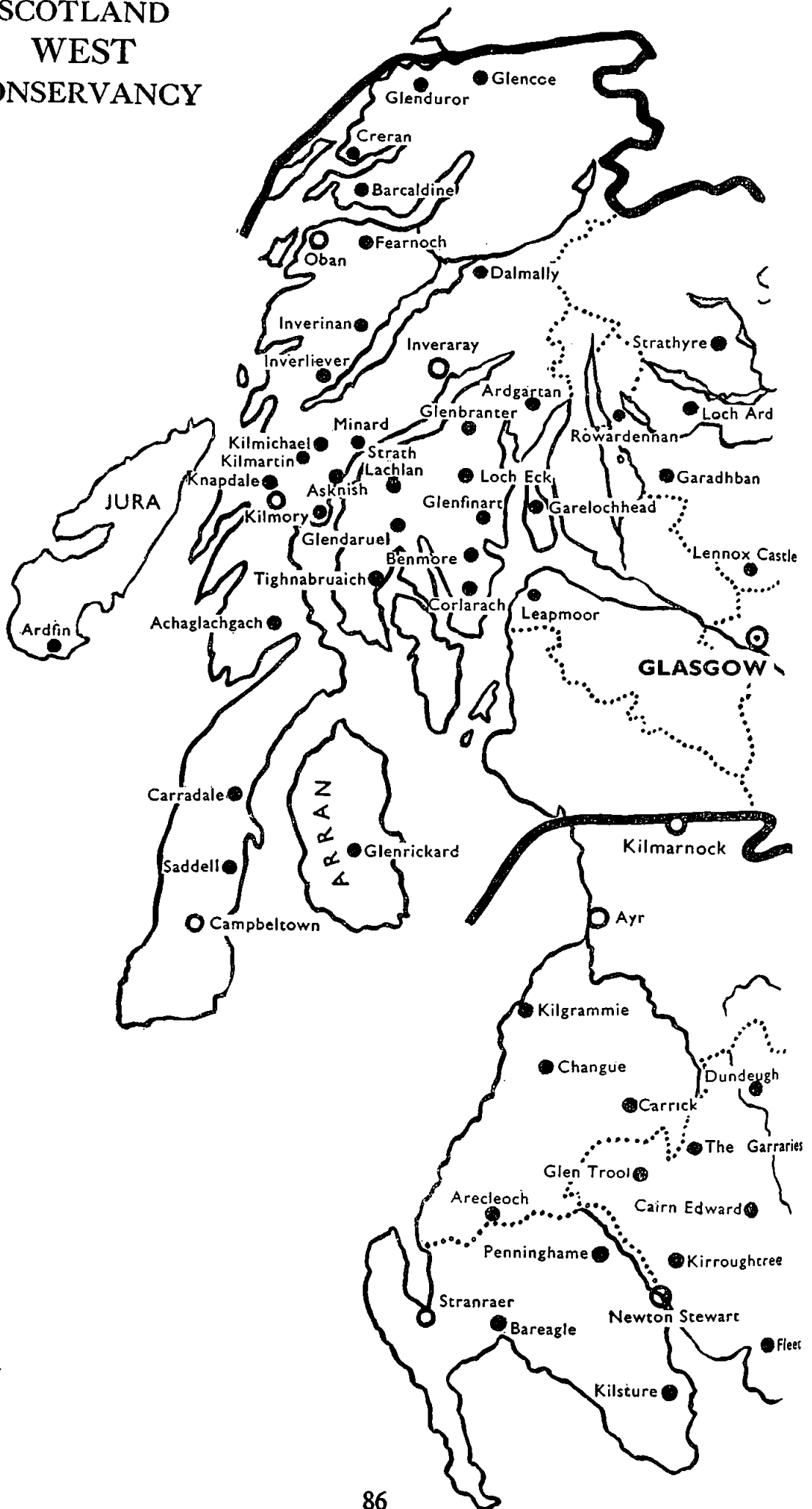
SCOTLAND NORTH CONSERVANCY

- Forests: ●
Towns: ○

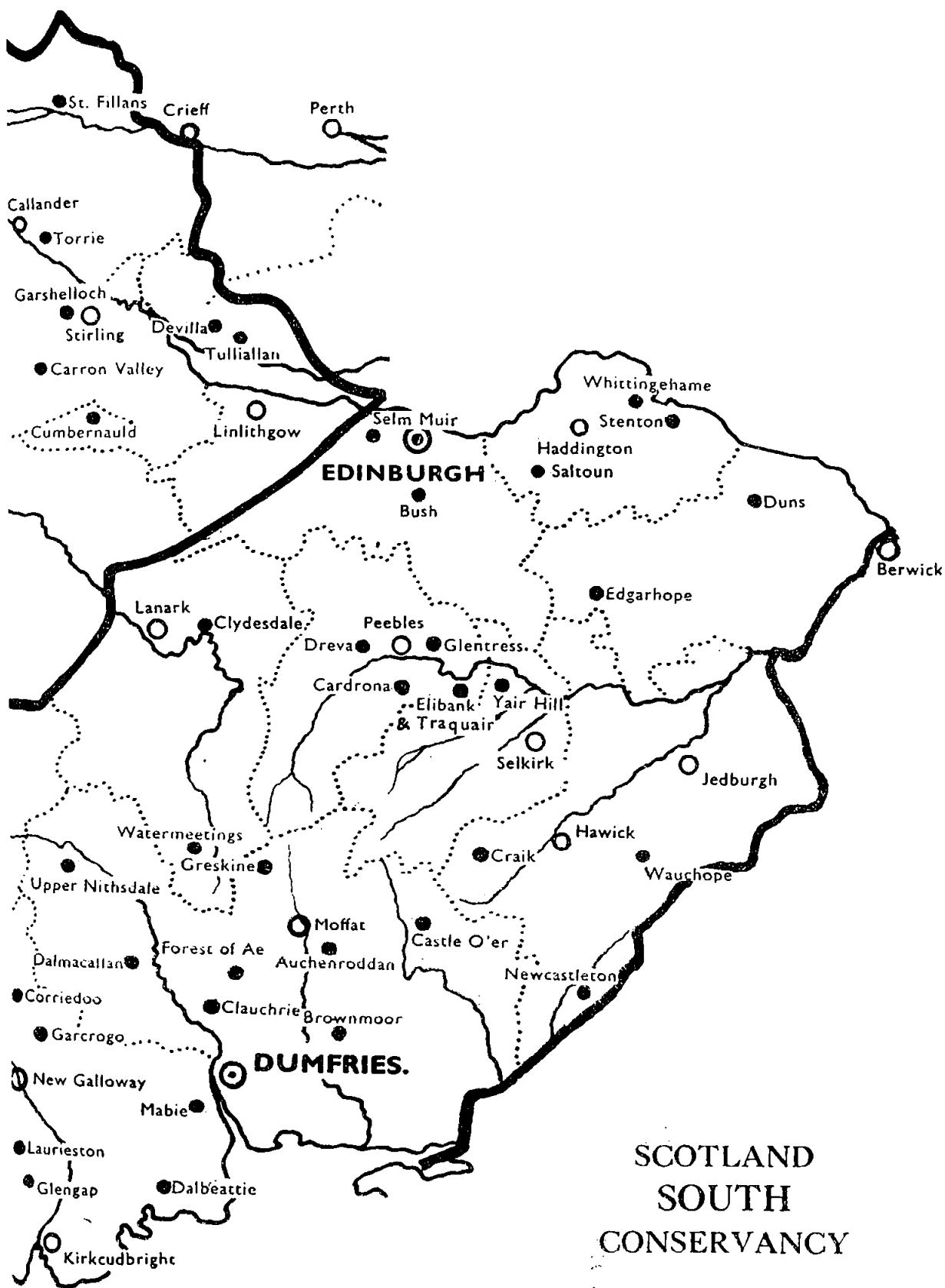




SCOTLAND WEST CONSERVANCY

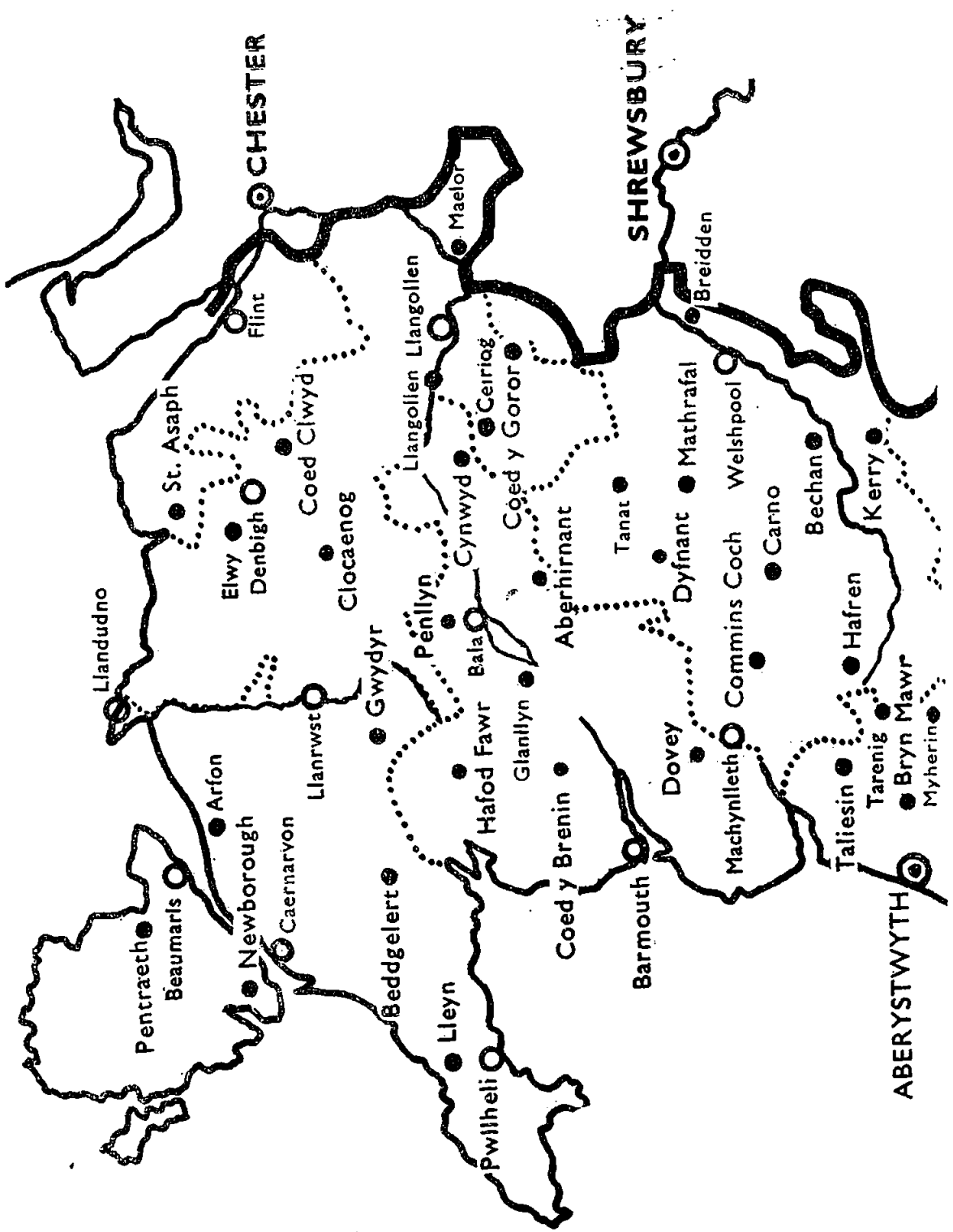


Forests: ●
 Towns: ○



SCOTLAND
 SOUTH
 CONSERVANCY

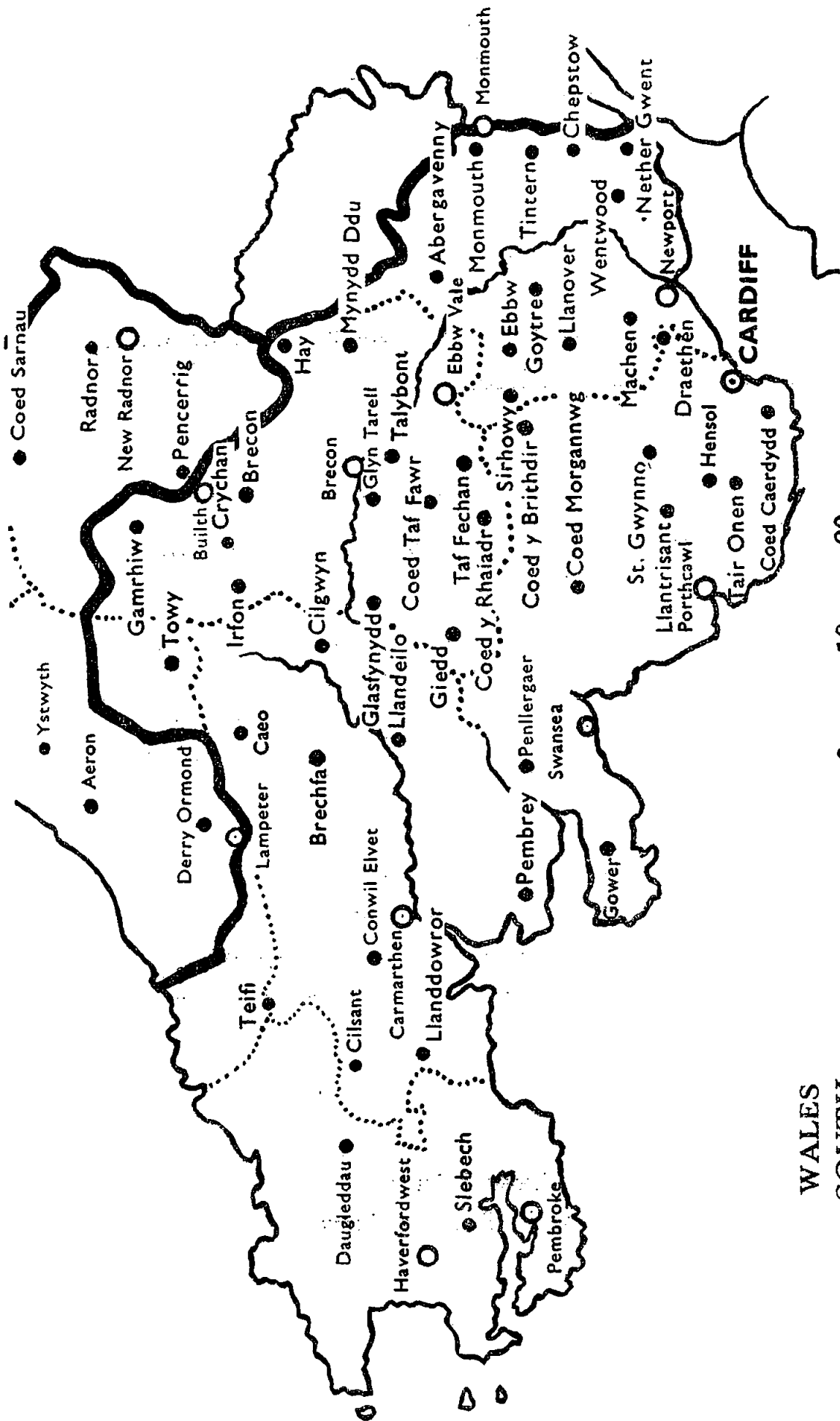
0 10 20
 Miles



WALES NORTH CONSERVANCY

Forests: ●

Towns: ○



WALES
SOUTH
CONSERVANCY



Addresses of the Main Offices of the Forestry Commission

Headquarters of the Forestry Commission :

25, Savile Row, London, W.1. (*Regent* 0221.)

Director of Forestry for England :

1, Princes Gate, London, S.W.7. (*Kensington* 9691.)

Director for Forestry for Scotland :

25, Drumsheugh Gardens, Edinburgh, 3. (*Edinburgh Caledonian* 4782.)

Director of Forestry for Wales :

Victoria House, Marine Terrace, Aberystwyth. (*Aberystwyth* 367.)

Director of Research and Education :

25, Savile Row, London, W.1. (*Regent* 0221.)

Conservancy Offices

England :

North-West: Upton Grange, Upton Heath, Chester. (*Chester* 24006.)

North-East: Briar House, Fulford Road, York. (*York* 24684.)

East: Brooklands Avenue, Cambridge. (*Cambridge* 54495.)

South-East: Danesfield, Grange Road, Woking. (*Woking* 2270.)

South-West: Flowers Hill, Brislington, Bristol, 4. (*Bristol* 78041.)

New Forest: The Queen's House, Lyndhurst, Hants. (*Lyndhurst* 300.)

Dean Forest: Whitmead Park, Parkend, Lydney, Glos. (*Whitecroft* 305.)

Scotland :

North: 60, Church Street, Inverness. (*Inverness* 608.)

East: 6, Queen's Gate, Aberdeen. (*Aberdeen* 33361.)

South: Greystone Park, Moffat Road, Dumfries. (*Dumfries* 2425.)

West: 20, Renfrew Street, Glasgow, C.2. (*Glasgow Douglas* 7261.)

Wales :

North: 15, Belmont, Shrewsbury. (*Shrewsbury* 4071.)

South: St. Agnes Road, Gabalfa, Cardiff. (*Cardiff* 33051.)

Research Station

Alice Holt Lodge, Wrecclesham, Farnham, Surrey. (*Bentley* 2255.)